

### Introduction



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It was in the final centuries BC that the first references appeared in classical written sources to peoples other than the Celts among those who had settled central and northern Europe. In time they were described en masse as Germanic. At first the ancients' knowledge about this part of the world was limited, and the surviving sources supply very little information. An evident increase in the number of sources takes place not until the 1st c. BC, and even more so, in the century that followed (Grane 2003; Krüger 2003: 6-9; Kolendo, Płóciennik 2015).

The earliest people to be recorded who – in light of later records - may be safely recognized as Germanic, were the Teutones. Their presence on the North Sea, presumably at the base of the peninsula of Jutland, was recorded by the Greek geographer and traveller Pytheas of Massalia (modern-day Marseilles), who in the late 4th century BC made a voyage of exploration to northern Europe.

As a result of a series of southward migrations the Germanic peoples entered the orbit of the Mediterranean world's interest, starting from around the cusp of the 3<sup>rd</sup>/2<sup>nd</sup> c. BC. Consequently, several names of tribes were recorded in the classical sources, among them the Bastarnae, Scirii, Cimbri, and the earlier mentioned Teutones, whose invasions impinged upon both the Greeks and the Romans (Maciałowicz, Rudnicki, Strobin, in this volume).

The Romans however obtained increasingly more information about the northern peoples in connection with the policy of the expansion pursued by their Empire during the 1st c. BC and early into the century that followed. This is also when a tendency appears among ancient authors to refer en bloc to the neighbours of the Celts inhabiting central and northern Europe as Germani. An important role in spreading this ethnonym was played by Julius Caesar in his famous 'Gallic War' (De bello Gallico). During the conquest of Gaul around the middle of the 1st c. BC he had the opportunity on

many occasions to fight and negotiate with representatives of different Germanic tribes that had come to the region sometime earlier from across the Rhine, having taken some of this valuable Celtic land by force. The greatest of these warlike peoples were said to be the Suebi, their importance confirmed by the fact that the Suebian king Ariovistus (who had invaded Gaul) even received the official title of Friend of the Roman people (amicus populi Romani). It was Caesar who was the first author in Antiquity to clearly distinguish the Germanic peoples from the Gauls (Celts), describe their customs, and also list the tribes known to him, locating their original lands to the east of the Rhine.

More details on the subject of the land which in time came to be called Germania (and on its inhabitants) are provided by the monumental work 'Geography', penned in the beginnings of the 1st c. AD by the Greek historian and geographer Strabo (Kolendo, Płóciennik 2015: 79–97; cf. Kolendo 2009). This was the time of the reign of i.a. Augustus, the first emperor of Rome, who in a string of conquests extended the borders of the Empire. During this period the Romans took control for a time of the territory between the Rhine and the Elbe; their navy even reached as far as Jutland, and possibly even sailed through the Danish straights to the Baltic. Strabo - similarly as Caesar before him - asserted that the largest of the Germanic tribes were the Suebi, their territories extending from the Rhine as far as the Elbe, and even to the east of that river. Many other tribes were recognized by the same author as Germanic, among them the Cimbri, whose homeland was in Jutland. Strabo's work is significant also because it is the first source to record the peoples settled at that time in the lands of Poland. The most notable of these was 'the great people' of the Lugii (Lugioi) and, probably, the Goths (Gutones). The presence of the Lugii in Poland during an even earlier age may be confirmed by the name Lugius, mentioned by the Roman historian Orosius, who mentions Lugius as one of the kings taking part in the Cimbri invasion of Italy of 101 BC (Maciałowicz, Rudnicki, Strobin, in this volume; cf. Kolendo, Płóciennik 2015: 43-53).

On the other hand, according to a map made in the late 1st c. BC based upon the work of the famous Roman leader Marcus Agrippa, *Germania* extended from the Rhine to the Vistula (Kolendo, Płóciennik 2015: 55–69). The eastern boundary of this land was drawn in an entirely arbitrary manner, based on the only topographic feature better known to the Romans at this time – the large river called the Vistula. The presence of Germanic tribes in the territory of Poland – among them, the

Lugii mentioned by Strabo (according to some researchers this was initially the name of a Celtic tribe, cf. Kolendo, Płóciennik 2015: 47 ff.) and the Goths – is confirmed by sources from the late 1<sup>st</sup> c. AD, when, as a result of intensified contacts with the northern barbarians, the Romans gained more information on the subject of eastern central Europe (Kontny, in this volume).

As Germanic tribes, alongside the Celts, steadily (and sometimes literally) came into the sphere of interest of the inhabitants of ancient Greece and Rome, events involving them were described on the pages of history. What this means is that around the 4<sup>th</sup>/3<sup>rd</sup> c. BC central and northern Europe enters the period of protohistory. This in turn makes it possible for us to attempt to identify the peoples named in the written sources with specific archaeological cultures. At long last we are free to make an ethnic interpretation of the archaeological material. Naturally, for the Iron Age an identification of this sort tends to be associated with an oversimplification, since the ancient written sources are usually sparing with their information and, moreover, we do not know how accurately their authors described and interpreted the reality of the barbarian world. The next limitation worth considering is the observation, confirmed by modern ethnographic studies, that an area of the occurrence of a given culture rarely coincides with the extent of a single linguistic group, not to mention that a very similar culture may characterize peoples speaking the same language but formally representing separate - competing socio-political units (e.g., tribes). Moreover, bearing in mind the numerous limitations that come into play when studying the culture of prehistoric societies via archaeological sources, in assigning ethnic 'labels' to artefacts we need to be all the more aware of the error of potential oversimplification, or outright distortion. Nevertheless, contrary to those who propose to rank archaeology among the social sciences, alongside e.g., anthropology, it should be treated first and foremost as a historical science (and this is also how its target recipients, that is, the general public, wish to see it). Consequently, making this sort of attempt to identify the silent artefacts with events and peoples described in the ancient written sources is a methodological obligation for any researcher concerned with the protohistoric period.

From an archaeological point of view, the last five centuries BC in central and northern Europe are the pre-Roman period (coincident with the La Tène period, which is used for the territory under Celtic settlement). At this time, in the territory of present-day Germany (and partly also in Demark and in western Poland) the so-called Jastorf culture was in

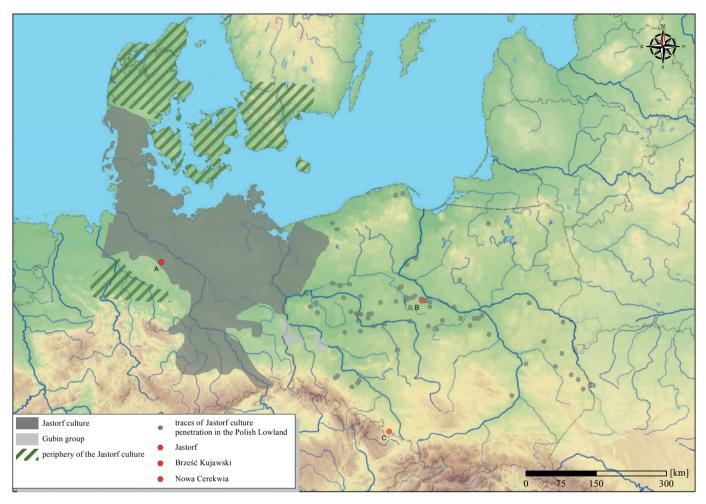


Fig. 1. Extreme range of Jastorf culture in the 4<sup>th</sup>/3<sup>rd</sup>–2<sup>nd</sup> c. BC. After Krüger 2003; Dąbrowska 1986; Grygiel 2013. Digital processing by M. Chwiej

existence, named after a cemetery discovered at the locality Jastorf in Lower Saxony, Germany (Fig. 1). Thus, the Germanic tribes from the Elbe region and Jutland named in the sources mentioned earlier may be identified with the population of Jastorf culture. The eastward and southward shifts in its range, recognizable in archaeological material, and subsequently, the coming into contact with the Celts, brought about significant culture change across broad expanses of central and eastern Europe, including the territory of Poland. These changes, starting around the mid-3<sup>rd</sup> c. BC, are referred to

as the 'Latenization process', from the name of the La Tène (Celtic) culture, many elements of which were adopted by the Germanic population. It is accepted in archaeology that the phenomenon of 'Latenization' was so important a watershed in the cultural development of central and northern European societies that it marks the beginning of a new epoch – the late Iron Age (Fig. 2). Its first segment, covering the last quarter of the first millennium BC, is referred to as the late pre-Roman period (Dąbrowska 1988; Martens 1998: esp. 170, 178, 179; Brandt 2001).

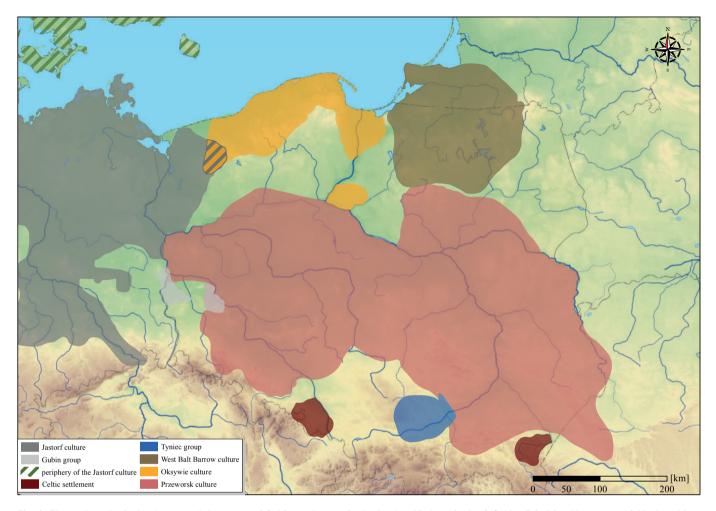


Fig. 2. The archaeological cultures and the range of Celtic settlement in the lands of Poland in the 2<sup>nd</sup>–1<sup>st</sup> c. BC. After Kaczanowski, Kozłowski 1998, with the author's modification.

Digital processing by M. Chwiej

# Societies of Jastorf culture in the Polish Lowland (4<sup>th</sup>/3<sup>rd</sup>-2<sup>nd</sup> c. BC)

#### **ARRIVALS FROM NORTHERN EUROPE**

Around the turn of the 4th and the 3rd c. BC, thus still during the Early pre-Roman period, in areas of western and central Poland, especially in Wielkopolska, Kujawy, and Mazowsze, there is evidence in the material record for the arrival to these regions of a new population from the northern zone of Jastorf culture - that is, from areas in present-day northern Germany and Jutland (Fig. 1). Based upon archaeological sources, this settlement was relatively dispersed, with larger concentrations located mainly in Wielkopolska. Relatively soon in any case, in the second half of the  $3^{rd}$  and in the  $2^{nd}$  c. BC (or at the beginning of the late pre-Roman period), this settlement spreads further, to southern and eastern Poland. Similar finds - although in a smaller number - are also noted in northern Poland, on the lower Vistula and in Mazury (Maciałowicz 2011: Grygiel 2013; Woźniak 2013). Thus, artefacts linked with the newcomers, rather than forming a single, geographically compact concentration, are spread across the territory of Poland. Moreover, at the beginning of the  $2^{nd}$  c. BC in the area occupied or penetrated by Jastorf culture new, and in many aspects similar groupings come into being: Przeworsk culture (in central and southern Poland) and Oksywie culture in Pomorze, at the same time, there is a gradual fading away of assemblages typical for Jastorf culture (Fig. 2). The dispersed pattern of settlement of the Germanic newcomers, and also the dynamics of change in culture and settlement that followed soon enough, that is, over the 3<sup>rd</sup> and the 2<sup>nd</sup> c. BC, make it guite hard to correctly identify findings we could link with the population that arrived to the region from northern Europe.

The largest group of findings are small, open (i.e., unwalled) settlements, which have yielded fragments of handmade pottery with traits typical for the pottery known from the northern zone of Jastorf culture (Grygiel 2004: 19–45; 2013: 25–40). This similarity is especially striking in the case

of vessels that were used during the older (first) phase of occupation in these sites, i.e., from 4th/3rd and early 3rd centuries BC (Fig. 3, 4). In the younger phases of occupation, over the 3rd and the 2nd centuries, hand-made vessels in the territory of Poland increasingly take on local traits, which sets them apart from their northern European prototypes. They include the distinctive decoration with geometric motifs, at times, with a meander design, and also the tendency toward increasingly thicker and profiled (facetted) vessel rims (Fig. 5). From the settlement site in central Poland, important for recognizing this phenomenon, this category of finds has been described as type Brześć Kujawski pottery or materials of older and younger settlement phase.

A different sort of clay object, recorded in some settlements featuring this type of pottery, are the so-called fire-dogs (Fig. 6) (Michałowski, Teska 2012; Woźniak 2013: 15–16). Small stands, or figurines, usually cuboidal, presumably were placed near the fire (perhaps the family hearth?). They are thought to be associated with some form of worship, and by analogy to similar finds from other regions of Europe some researchers have attributed them tentatively to rituals associated with deities guarding the household. And although we cannot say anything certain about the way these objects were used by the population living in Poland, the interpretation of their special purpose would be supported by symbolic marks – e.g., swastikas – with which some of the fire-dogs were decorated (Fig. 6:a). Fire-dogs of a similar form and decoration have been discovered e.g., in the northern zone of Jastorf culture, thus the finds from Poland could be evidence for the continuation by the Germanic immigrants of their native ritual practices.

The next category of finds we can associate with the presence of new settlers is that the crown-shaped neckring made of bronze. These intriguing objects, in the form of a hoop surmounted with larger or smaller triangular spikes, consist of two parts connected by a hinge, which made it possible

to open the neckring (Fig. 7, 8). The top of the hinge was usually surmounted by a rosette, sometimes decorated on its surface with engraved designs. This category of ornaments also indicates the northern European origin (mostly Jutland) of settlers arrived to the territory of Poland (Kaul, Martens 1995: 136-137; Maciałowicz, Nowakowska 2006: 324-326; Woźniak 2013: 16-18). Next to the evident resemblance of the crownshaped neckrings found in Poland to the finds from Denmark, this is also supported by their archaeological context. In the northern zone of Jastorf culture they were mostly recovered from lakes or bogs, which led to their interpretation as votive finds or sacrifices made to the deities. In Poland there is also evidence for similar practices associated with these objects. Few crown-shaped neckrings were discovered in an aquatic environment, i.e., in a wetland (Kluczewo; Fig. 7) and in a well (Izdebno Kościelne; Fig. 8). In the latter case it is hardly credible that this is an item lost by accident by some clumsy water carrier rather than an intentional deposit (votive offering?) made at the sources of potable water by one of the inhabitants of that settlement.



Fig. 3. Vase of Jastorf culture from Izdebno Kościelne, typical for the older phase of type Brześć Kujawski materials. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski



Fig. 4. Pottery of Jastorf culture from Brześć Kujawski, typical for the older phase of this site. After Grygiel 2004; 2013

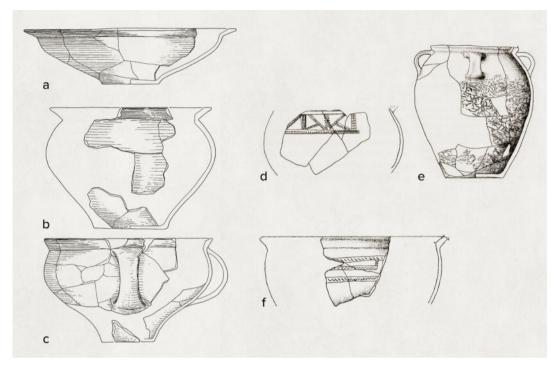


Fig. 5. Pottery of Jastorf culture, typical for the younger phase of type Brześć Kujawski materials: a, b, c – Grabkowo; d, e, f – Brześć Kujawski.

After Kaczor, Żółkiewski 2014 (a–c); after Grygiel 2004 (d–f)

Thus, there is much to show that the crown-shaped neckrings were not an 'ordinary' ornament with a purely aesthetic value, one that was subject to e.g., long-distance commercial exchange. On the contrary - these objects give every indication of having a special, indeed symbolic meaning. The shape of some of the neckrings with longer spikes would have restricted head movement, thus they could not have been worn during normal daily activity. More likely, they were donned on special occasions, e.g., on holydays or during special ceremonies. Based on the analysis of bone remains and artefacts found in the same context with the neckrings in a small number of grave assemblages recorded in central and northern Europe it may be concluded that ornaments of this exceptional form were used primarily by women, and young girls too. This would be supported by the small diameter of the hoop in some of these finds. In Poland, too, crown-shaped neckrings have been recorded in graves. Unfortunately, these are finds which to date have not yielded evidence allowing determination of the sex and age of the buried individuals.

Dress pins are another form of a bronze ornament discovered in settlements and also as stray finds (with no known archaeological context). They represent various forms, ranging from the so-called Holstein to winged pins (Fig. 9, 10). These are artefacts typical mainly for the territory in the lower

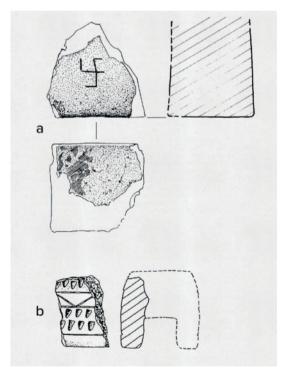


Fig. 6. Fragments of clay objects, so-called fire-dogs, from the Jastorf culture settlements: a – Nowe Miasto; b – Wytyczno.

After Dzieduszycki, Makiewicz, Sobucki 1998 (a); after Mazurek 2001 (b)

Elbe drainage, Jutland, and the island of Funen (Grygiel 2013: 40, 42, figs. 19:1–3; Maciałowicz 2014: 351–355, figs. 4–11). It may be added that one of the Holstein pin finds from Poland (Łuszczewo; Fig. 7:b) was discovered during peat digging near a lake, thus in similar circumstances as many of the pins and crown-shaped neckrings found in Denmark. This fact lends weight to the interpretation that the users of these ornaments in Poland were bearers of northern European traditions.

The complex character of these finds (settlements with many finds of Brześć Kujawski type pottery, distinctive bronze ornaments, evidence for practices of a symbolic or a devotional nature and objects associated with them), with exact parallels in the northern zone of Jastorf culture, indicates not so much the adoption of very distant models by the inhabitants of Poland as the coming to the region of outsiders from northern Europe who brought a new cultural model, one that was strange in the local environment.

What is problematic, however, is that these settlements usually consist of a few to a dozen-odd domestic features, in the form of semi-subterranean or subterranean huts, always small in size (Michałowski 2010). These were single-space dwellings dug into the ground to a smaller or greater depth (ranging from ca. 0.5 to 1.5 m), measuring ca. 3 x 5 m. – more rarely, slightly larger. Their walls presumably extended only a little above the level of the terrain and were made of inter-

woven twigs plastered with clay (wattle-and-daub). In contrast, for the northern German and Danish territory the typical form of settlement is one with many long houses, with no sunken floor (Martens 2010). These were much larger buildings (measuring at least ca.  $5 \times 10$  m), with walls supported by a frame built by a row of wooden posts driven into the ground at more or less regular intervals. These houses were characterized by an internal division into several spaces serving different purposes (e.g., as a living quarter or as a byre).

These differences in the size and the method of building settlements in the two regions can be interpreted in terms of differences in climatic and environmental conditions, or possibly also in terms of the less stable nature of the settlement in the territory of Poland, or a dissimilar social organization. Admittedly, all these factors may have been at play, given that during their long trek the society of immigrants would have covered a distance of more than ca. 1000 km! The relatively mobile character of settlement is also indicated by the fact, noted earlier, that the habitation sites are on a quite dispersed pattern and occur in many different parts of the country.

Also relevant in this respect is the absence of large cemeteries in which the inhabitants of the Brześć Kujawski type settlements could have buried their dead. What is usually discovered are only single graves, or just a few – sometimes found near the settlement. More often, however, we discover



Fig. 7. Bronze crown-shaped neckring found in boggy meadows at Kluczewo. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski



Fig. 8. Bronze crown-shaped neckring found in a well in the Jastorf culture settlement at Izdebno Kościelne. Institute of Archaeology, Warsaw University.

Photograph by M. Bogacki & M. Dabski



Fig. 9. Bronze Holstein pins: a — Sobiejuchy; b — Łuszczewo. The Archaeological Museum in Poznań.

Photograph by M. Przybył



Fig. 10. Bronze winged pin from Równina Dolna. After Maciałowicz 2014

them on the periphery of a cemetery used by the local societies of the Lusatian culture, or Pomeranian-Cloche culture of the Early Iron Age (Grygiel 2004: 50-59; 2013: 39-40). Consistently with customs prevailing during this epoch across broad tracts of Europe, including the cradle of the group of the newcomers discussed here, these were cremation graves, mostly urned – more rarely, pit burials. The burnt bones of the dead individual were placed in a pottery cinerary urn (after washing to remove the carbonaceous remains of the pyre; Fig. 11) or poured directly into a small pit dug in the ground. Often, the opening of the cinerary urn was covered with a smaller, inverted vessel (bowl or cup). Some graves contained individual metal ornaments (neckrings, pins, and later, also brooches) and tools (mostly, iron razors, knives and whetstones), ones that were placed next to vessels, if any were included (Fig. 12).

This absence of larger, long-lived burial grounds suggests the mobile mode of life of the newcomers from the northern zone of Jastorf culture, and to some extent, also a certain 'atomization' of these societies, which possibly consisted of small groups, e.g., families, clans, etc. This in any case would be a phenomenon corresponding to the situation noted in the Pomeranian-Cloche culture of the early Iron Age (Dzięgielewski, in this volume). The substantial mobility of these Germanic settlers is indicated, as noted earlier, by the fact of their appearance around the 4<sup>th</sup>/3<sup>rd</sup> c. BC in many areas of western, central, and northern Poland and their subsequent relatively rapid expansion (3<sup>rd</sup>–2<sup>nd</sup> c. BC) east- and southward.

The location of Jastorf culture graves in cemeteries used by the early Iron Age societies of Lusatian culture and Pomeranian-Cloche culture – with mutual respect evidently shown for the separate burial space – suggests that the newcomers entered into a relatively peaceful relationship with the local population. One suspects that they intentionally adopted the local tradition in using a specific sacred space, one most likely represented by the area of the cemetery. It is much harder to demonstrate possible relations between the societies of Lusatian culture and Pomeranian-Cloche cul-

ture, on the one hand – and the population originating from northern Europe on the other, based on the material from settlements (Dąbrowska 2008: 94–95; Grygiel 2013: 43–44). Admittedly, some settlement sites have produced features and pottery of these two Early Iron Age groupings as well as Jastorf culture material, but the difficulty in dating late Lusatian and Pomeranian-Cloche finds prevents reliable conclusions as to whether the site was occupied by representatives of both societies during the same period, or the same site with e.g., a favourable location, was used consecutively by successive groups of different settlers.

Nor is it to be discounted that at the end of the Early Iron Age certain processes of depopulation had taken place, leading to a local decrease in the density of the settlement network (especially in the western part of the country), but it is hard to accept that the population of Lusatian and Pomeranian-Cloche cultures completely 'disappeared' at this time from the territory of Poland (Dzięgielewski, in this volume). Thus, the Germanic newcomers appeared at first in areas where settlement of the Early Iron Age groupings was no longer as dense as before, but nevertheless, they most likely came into contact with the indigenous population, as is indicated by finds from cemeteries. It is notable that the probable coexistence at first, i.e., during the 3<sup>rd</sup> c. BC, brought about no major change or acculturation of the societies involved: in any case, not on the level of a culture recoverable through archaeological methods. It may be assumed therefore that the relations between the newcomers and the indigenous population of the territory of Poland were none too intensive at this time, and that the two groups exploited basically different ecumenes.

It is worth devoting a few words at this point to discussing the matter of the economy of the Jastorf culture population which had moved to the lands of today's Poland. Despite the unsatisfactory status of research made in this respect, it may be supposed that the main branches of subsistence were agriculture and animal husbandry. Analysis of animal remains discovered in settlements indicates that the main species was cattle (shorthorn breed), with a smaller percentage of goats and sheep (these two species of Caprinae cannot be distinguished basing on the morphology of their bones), pigs, and horses (e.g., Bednarczyk, Kośko 2004: 418; Czerniak, Gąssowski 2008: 73-74, 225-238; Machajewski, Pietrzak 2008: 168, 233, 309, 483; Kaczor, Żółkiewski 2015: 305, 414). Cows were reared mostly for their milk and dairy products (e.g., cheese), oxen were used as draught animals, including in agriculture. Similarly, goats and sheep supplied milk, but





Fig. 11. Cremation urned grave of the Jastorf culture from Wilcza Wólka, during excavation.

After Grabarek 2011

the main advantage from rearing them was wool, which was used to make clothing. Moreover, the domesticated cattle and the *Caprinae*, once slaughtered, were an important source of meat, hides, and fats. Pigs were reared basically only for their meat, but the limited frequency of their remains in settlements indicates that they were not its main source. The horse was used presumably mainly as a draught animal and in transport, although the consumption of its meat has to be taken into consideration, too. The lack (or only a limited number) of bones of domesticated birds and of fish discovered in settlements may be explained by their structure, subject as it is to rapid decay,



Fig. 12. the Jastorf culture burial at Wilcza Wólka: a – cinerary urn made of clay; b – iron brooch.

After Grabarek 2011

and as such likely to escape detection during excavation work if not conducted with sufficient care. At all events, the slightly later findings from the Przeworsk culture context, dating to the late pre-Roman period, confirm that poultry was raised: its remains discovered in human graves are interpreted as food offered to the deceased. Our main piece of evidence for fishing is from the location of Jastorf culture settlement sites, which are mostly situated in river valleys. On the other hand, the diet of the societies in question would have been supplemented only to a small extent by the meat of game animals (mainly hare, red and roe deer, and aurochs), as is documented by the negligible number of their remains recovered from settlements. Presumably, these species were hunted also for their skins and – except for the hare – for their antler. The latter material, and even more so, animal bone, was used to make tools (e.g., awls, scrapers), everyday objects (e.g., skates, combs, as well as various hafts for metal tools), and most likely, also of dress accessories and personal ornaments (e.g., pins used in fastening clothing, as indicated by finds from northern European peat bogs) (Bednarczyk, Kośko 2004: 417; Czerniak, Gąssowski 2008: 73; Pietrzak, Machajewski 2008: 306; Kaczor, Żółkiewski 2015: 303).

As for the food obtained from plants, it mainly came from the cultivation of cereals, which may have included rye, wheat, and oats. Their grains were consumed cooked (as groats, gruel, etc.) or ground into flour and baked into flatbread, or cooked to make a soup. The study of food remains in the digestive systems of the perfectly preserved human bodies recovered from the peat bogs of northern Germany and Denmark (thus, in the northern zone of Jastorf culture, the area of the origin of the groups which settled in Poland) have confirmed the consumption during the pre-Roman period of plain soups or gruel from cooked cereal grains and seeds (van der Sanden 1996: 106-119; Asingh, Lynnerup 2007: 154-187). It is worth noting nevertheless that – as has been stressed in the literature – crop yields in the Iron Age were relatively low and consequently food obtained in this way could not form the basis of the diet for the societies of that time. It should also be remembered that the population was under the constant threat of starvation, due to the following: the low output of the still quite primitive agriculture, the limited means for longer storage of possible surpluses (reserves) of food, and even more so, the unfavourable climate, mostly cold and wet, which contributed to all kinds of natural disaster e.g., floods.

#### A TIME OF CHANGE - A TIME OF IRON

An obvious transformation within Jastorf culture society in the territory of Poland takes place around the mid-3<sup>rd</sup> c. BC, which is regarded as a start of the late pre-Roman period. This is the time of change in pottery styles mentioned earlier, involving the tendency to provide vessels with thickened and profiled (facetted) rims and to decorate vessel surfaces with geometric designs, some of which used the meander motif (Fig. 5). As pointed out earlier, this change has been described using finds from the younger phase of the settlement at Brześć Kujawski. The spread of this younger pottery also marks the next stage in the expansion of the population of Jastorf culture – this time, to eastern and southern Poland, but very likely also to areas outside our country, which process will be discussed later.

Both of these phenomena converge with the coming of these societies into closer contact with the Celts residing in southern areas of Poland (Woźniak 2013). Imaginably, a catalyst which set off bilateral relations was the establishing by the Celtic Boii of a network of settlements spread across central Europe. They played the part of interregional centres in catering to e.g., long-distance trade exchange, but also in recruiting mercenaries sent to areas of many armed conflicts unfolding in the Mediterranean basin in the final centuries BC (Maciałowicz, Rudnicki, Strobin, in this volume). One of these centres came into being in a southern outlying area of Poland (Nowa Cerekwia), at the Moravian Gate, a depression between the Sudetes and the Carpathian mountain ranges (Fig. 1). As such the settlement occupied a location strategic for communication on the north-south axis. It certainly played a major role in e.g., organizing the trade in amber, sourced in the area on the Bay of Gdańsk, as is indicated by finds of raw amber inside the settlement. However, the peak of the operation of the long-distance network of amber distribution came sometime later, in the 1st c. BC. One commodity mentioned among the northern goods which may have interested the Celts, especially those settled in the area of present-day Bohemia and Moravia, is salt, obtained by evaporating sea water or from numerous salt springs in central and south Poland (Bochnak 2014: 176-178). Today we may be inclined to see this substance as only a seasoning which if used without moderation is bad for one's health. Meanwhile, salt supplies minerals necessary for the proper functioning of the body and in the past played the crucial role of a food preservative. Also of possible significance in establishing relations with the

Celts were bog ores, abundant in western Mazowsze, which start to be exploited precisely during the late pre-Roman period to smelt iron on a large scale. And since one of the uses of this material was to make weaponry, the character of the contacts may have been related to the supposed role of Celts as intermediaries in recruiting Germanic warriors to enter mercenary service in the armies of Mediterranean rulers. This is supported by some other artefacts recovered in central Poland, most of all, early Celtic and Greek coins (Maciałowicz, Rudnicki, Strobin, in this volume).

And so, at least some of the Jastorf culture communities – as they had settled in central Poland, Wielkopolska, Kujawy, and some areas on the lower Vistula as well – joined in the system of long-distance connections on the north-south axis started by the Celts. On the one hand, the areas named above abounded in goods that were in demand in the south; on the other, they had a key significance for the operation of the communication routes between the Baltic Sea and the Moravian Gate.

Another circumstance which would have facilitated the coming into contact of the Jastorf culture population with the Celts was the spread of the former southward, to Śląsk, and possibly, also to Małopolska, into areas neighbouring the Celtic enclaves in Poland. The exceptionally close relationship between the population of Jastorf culture and the Celts residing in the southern part of the country is confirmed by numerous finds of vessels of this culture (Brześć Kujawski type pottery of the younger horizon) and fragments of crownshaped neckrings that have been recorded at Nowa Cerekwia. On the one hand, they confirm close ties of the Germanic and the Celtic populations living in the same settlement; on the other, its role of an important interregional centre (Maciałowicz, Rudnicki, Strobin, in this volume). At the same time, the early presence of Germanic communities in Małopolska, one that may date back to the 3<sup>rd</sup> c. BC, is supported by isolated finds of typically Jastorf dress accessories (for example, so-called winged pins), known e.g., from the Celtic settlement at Podłęże (Dzięgielewski, Dzięgielewska 2012). However, the number of these finds is small and it is difficult to draw broader conclusions on their basis. At all events, so far we have no record of settlements in this region with a larger number of finds of Jastorf culture pottery.

The effect of these contacts was that of a gradually unfolding change in the culture of the Germanic societies, one that led to the adoption of many elements of La Tène culture, much more advanced in terms of civilization. This process,

referred to as 'Latenization' (as a result of which other archaeological units become similar to La Tène culture), begins in the territory of Poland around the mid-3<sup>rd</sup> c. BC and marks the onset of the late pre-Roman period (Grygiel 2004: 57–58, 61, pl. II; Woźniak 2013: 8). One of the more significant effects of 'Latenization' was the proliferation of the local production of iron. This is documented by larger and smaller ironworking settlements as well as isolated traces of iron production dating to this period recorded in different regions of the country.

There is some controversy as to the chronology of the great centre of iron metallurgy located to the west of Warsaw in Mazowsze (Orzechowski 2013: 211–224). The large number of production settlements identified here has yielded the remains of several thousand smelting furnaces (slag-pit furnaces) in the form of small pits filled with blocks of slag, the waste product from smelting. It is thought that these sites continued in use for even a few centuries, but the nature of these findings makes it hard to determine the chronology of the relics of every furnace. This fact, and the still incomplete publication of the materials from the Mazovian settlements, has caused the early chronology proposed for them, spanning 2<sup>nd</sup>-1<sup>st</sup> c. BC, to be questioned at times. Nevertheless the small number of finds of Brześć Kujawski type pottery of the younger horizon, and early vessels of the Przeworsk culture recorded in these sites, suggests that the production of iron from bog ore, readily available in the region, may have started already during the late pre-Roman period (e.g., Biskupice – cf. Dabrowska 2008: 19–20, 125, and unpublished materials kept in the Museum of Ancient Mazovian Metallurgy in Pruszków). Perhaps the operation of this highly specialized craft, which supplied iron in a quantity presumably exceeding the needs of the local society, would explain the relatively early appearance in Mazowsze of objects of Celtic origin e.g., brooches made of iron and bronze, glass bracelets and wheel-thrown pots – some of which have been discovered in areas directly adjacent to the ironworking settlements (Dabrowska 2008: 73; Bochnak 2014: 207, figs. 77, 78; Maciałowicz 2015: 274–282, 287, figs. 3, 6).

The great number of features linked to the production of iron (not only slag-pit furnaces, but also lime kilns, iron ore roasting sites, various hearths, wells, etc.), and their arrangement in settlements which remained in operation for several centuries even, suggest that the metallurgical activity in the Mazovian centre was strictly organized, which implies the existence of a decision-making centre. This case seems to indicate the existence in the territory of Poland in the late

pre-Roman period of highly evolved, economic, and possibly also political structures which, however, are not easily recognizable in the archaeological material (which is due to some extent to the status of research and publication). Nevertheless, we have to seriously take into account that a significant part in the emergence of this centre was played by the Celts, who not only had at their disposal a very advanced technology of smelting and ironworking, but also the experience needed to organize such large economic structures.

The next effect of 'Latenization' was the adoption of Celtic fashion in brooches (fibulae), now used in fastening clothes in the place of the earlier dress pins. The advantage of the fibula was its spring mechanism and connected pin, used to fasten the brooch to clothing which at the same time prevented the accidental slipping of the fabric (Fig. 12:b, 13, 14). Regrettably, nothing is known about the clothing worn by the Germanic population in the territory of Poland, i.e., clothes made from organic materials such as skins, wool, or linen. However, on the evidence of the finds of human bodies discovered in northern European bogs dating to the pre-Roman period, we may conclude that in the cradle of Jastorf culture mostly capes were worn, ones made of animal (mostly sheep-) skins, and various forms of simple woolen garments sewn from a rectangular length of fabric. The clothing outfit was completed by soft leather shoes (van der Sanden 1996: 120-134; Asingh, Lynnerup 2007: 290-315). Did the newcomers who settled in the territory of Poland wear similar clothing? Or perhaps, as a result of 'Latenization', had they taken to making woolen clothing modelled on the long Celtic cloaks and breeches - for men, and gowns or tunics - for women? (cf. James 1998: 64-65, 68). With no sources on textiles made of organic material when speaking about the clothing of the pre-Roman period inhabitants of the territory of Poland, we have in mind only the elements and dress accessories (ornaments) made of more lasting materials, mostly metal.

The earliest brooches of 'Latenized' form noted in the Polish Lowland are definitely objects brought in from the Celtic territory, although, with time – i.e., with the progress of black metallurgy and smithery in the region – less complicated forms were produced locally on the pattern of Celtic ornaments (Fig. 12:b, 13, 14). Interestingly enough, almost all of the earliest brooches are of iron. Apparently, even at this earliest stage of the 'Latenization', the Germanic societies settling the territory of Poland had accepted only the 'iron' variant of the La Tène fashion (Maciałowicz 2015: 273–274). This phenomenon is of interest inasmuch as this 'iron' fashion contradicts

the native traditions of the population originating from the northern zone of Jastorf culture. For there, starting from the early pre-Roman period, Celtic influences were manifested e.g., by the presence of imported, mostly bronze ornaments, and also by the fairly quick start of the local production of bronze dress accessories based on models deriving from the La Tène styles (Brandt 2001). Thus, for the population newly arrived in the territory of Poland 'Latenization' was associated with a major change in the preference for the material used in the production of metal dress accessories. Admittedly, the continuity of the northern European bronzeworking tradition is confirmed in the late pre-Roman period by some finds of ornaments discovered in Poland (brooches and crown-shaped neckrings typical for Jastorf culture; Fig. 7, 8, 15), but this continuity will relatively swiftly fade away, giving way to a new model, i.e., the use, almost invariably, of iron brooches only.

It is also puzzling that as a result of 'Latenization' the Germanic population in the Warta and the Vistula drainages adopted en masse just this one metal element of the Celtic costume - namely, the iron brooch. However, Celtic clothing – female in particular – features a rich array of personal ornaments such as bracelets and anklets made of bronze and iron, bronze neckrings, belts made of metal links, glass bracelets, and bead necklaces. They are noted in Poland but are very rare (Fig. 16), suggesting only a sporadic introduction of these attractive articles from the Celtic south (or possibly, the presence of Celtic groups in our region), and do not alter the overall view of the 'Latenized' model of dress accessories in Jastorf culture societies. It also needs stressing that graves from the beginning of the late pre-Roman period almost invariably contain only a single brooch. This type of costume - i.e., consisting usually of a single iron brooch - is typical in the La Tène culture for male graves (Waldhauser 1988: 39-45, fig. 5). Thus, we may suppose that the 'Latenization' of the costume of societies originating from northern Europe was limited to the adoption of the rather modest Celtic male fashion and with an almost complete disregard for the rich assortment of ornaments worn by Celtic women. The dress of the Germanic woman living in central Poland during the late pre-Roman period was thus a blend of the 'Latenized' male fashion (a single iron brooch which relatively soon displaced bronze pins) and a none too obvious continuation of the native, northern European tradition in the form of bronze brooches and crown-shaped neckrings, and iron belt fastenings, as well.

Another effect of the 'Latenization' of Jastorf culture was that of changes observed in the burial rite. A new form is

that of graves in the form of a pit into which was poured the pyre debris mixed with the cremation and broken, sometimes also burnt, pottery vessels, and every now and then, individual personal items, e.g., a brooch, razor, knife, or a whetstone (Fig. 13). At the same time, we need to note that pit burials containing burnt pottery, and the custom of deposition of individual ornaments or small tools in graves too, are recorded already in the early pre-Roman period, both in the cradle of Jastorf culture and in the cemeteries of Pomeranian culture in Poland. Thus, it is possible that these elements of the burial rite are evidence for the continuity of an earlier tradition, although



Fig. 13. Assemblage of the supposed cremation grave of Jastorf culture from Dąbrowa Biskupia: a whetstone, iron brooch and razor.

After Bohnsack 1938



Fig. 14. Iron ornamented Celtic brooch, from cremation grave in Warszawa-Dotrzymy. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski

the coming into contact with the Celts in the late pre-Roman period could have additionally assisted its expansion.

Another interesting new development is the higher frequency of everyday objects associated with men's activity (razors and whetstones) recorded in Jastorf culture burials. It may be that this situation is due to the generally small number of Jastorf culture grave inventories with tools, but this phenomenon is consistent nevertheless with the effects of the 'Latenization' of the costume of the societies residing in the territory of Poland. In both cases the adoption of Celtic models is associated primarily with the male sex.



Fig. 15. Bronze Jastorf culture brooch discovered in destroyed cemetery at Wszedzień. The Archaeological Museum in Poznań.

Photograph by A. Maciałowicz



Fig. 16. Bronze Celtic belt fastening with motif of animal mouth, discovered in cemetery at Świerkówiec. The District Museum in Toruń. Photograph by A. Maciałowicz

Worth mentioning in this context is the pit burial discovered in Warszawa-Żerań, which – next to the cremation - contained a bent two-edged sword in a richly decorated iron scabbard and a set of three rings made of the same metal (Fig. 17). The deposition in the grave of a dead warrior of ritually destroyed weaponry is definitely a telltale feature of Celtic burial rituals in the 3<sup>rd</sup> and early 2<sup>nd</sup> c. BC. Also, the sword, scabbard, and the metal rings for attaching the sword at the belt found in the grave are a group of objects whose provenance is the territory of La Tène culture (cf. Bochnak 2005: 41-43, 56). Regrettably, the absence of pottery in the grave assemblage prevents us from establishing whether this is the earliest case of the adoption by the Germanic population of the Celtic custom of burying dead warriors with ritually destroyed weapons (this phenomenon will find its full expression only later, in Przeworsk culture and the Oksywie culture environment) or if this is a burial of a Celtic man who died in central Poland and was buried according to his native custom (cf. Dabrowska 2008: 113). Regardless of which interpretation we accept, this is yet another example of close relations linking the Germanic population settling the territory of Poland with Celts.

As mentioned earlier, in the 3<sup>rd</sup> and the 2<sup>nd</sup> c. BC, we observe a further expansion of the Jastorf population east- and southward, its geographical range identifiable from settlement sites and graves with assemblages of Brześć Kujawski type pottery of the younger settlement phase, but also finds of crown-shaped neckrings. The appearance of Germanic settlers in Śląsk mentioned earlier is indicated by fragments of hand-made vessels and finds of crown-shaped neckrings, recorded e.g., at Nowa Cerekwia, and also by a small number of finds of Jastorf dress accessories known from Podłęże in Małopolska (see above). Also known from the latter region is a Jastorf culture grave recorded at Dwikozy which, next to pottery, contained a crown-shaped neckring (Woźniak 2013: 17; Grygiel 2013: 28, footnote 40).

The consequences of the migration of the Jastorf population in an eastern and south-eastern direction were much more far-reaching. That is, crown-shaped neckrings and ceramic wares highly similar to Brześć Kujawski type pottery of the younger settlement phase, and also to Przeworsk culture vessels, have been discovered in Ukraine as well as in eastern Romania and Moldova (Babes 1993; Kaul, Martens 1995: 136–137, 144–146, figs. 21, 29–31; Woźniak 2013: 20; see also Grygiel 2013: 46). The distribution of these finds has been used repeatedly in interpretations of the direction of the migration of the Bastarnae and the Scirii, two Germanic tribes (the former may have been a Celto-Germanic formation), who around the  $3^{rd}/2^{nd}$  c. BC appeared on the northern coast of the Black Sea. On the other hand, at least some of these neckrings have a dating later than the time of this migration as they originate not until the  $2^{nd}$  c. BC. Thus, the spread of this pottery and neckrings across eastern central Europe is not so much evidence for a specific historical migration of the two tribes, as (more likely) definition of the extent of the zone penetrated for an extended time ( $3^{rd}-2^{nd}$  c. BC) by a population with a tradition which may be traced back to the northern zone of Jastorf culture (Dąbrowska 1988: 75; cf. Maciałowicz, Rudnicki, Strobin, in this volume).

In Poland settlement sites and graves containing Brześć Kujawski type pottery of the younger phase disappear from the archaeological record during the 2<sup>nd</sup> c. BC (Grygiel 2013: 45). On the one hand this may have been related to some extent to the migrations of the Germanic population deeper into eastern and south-eastern Europe. On the other, still at the beginning of the same century two new cultures may be seen to take form in the territory of Poland (Fig. 2): Oksywie culture in Pomorze (Strobin, in this volume) and Przeworsk culture in central and southern Poland (see below). The latter especially takes into its range areas in the Warta and Vistula drainages, which have yielded a larger number of finds attributed to the newcomers from northern Europe. Many elements of the newly emerged Przeworsk culture, especially in pottery (a very traditionalist branch of crafts production), are evidently compatible with the Brześć Kujawski type materials (younger settlement phase). And while this question is still in dispute in archaeology circles, we may assume that among the makers of the new Przeworsk culture (and possibly also of Oksywie culture) were largely the same societies that we identify with Jastorf culture in the Polish Lowland (cf. Woźniak 2013: 20-21; Grygiel 2013: 46). In this way, without negating potential further easterly shifts of the Germanic population, we may assume that the disappearance of Brześć Kujawski type materials was associated with transformations which led to the emergence of Przeworsk culture, an archaeological unit representing a new, and to a much greater extent 'Latenized' model.

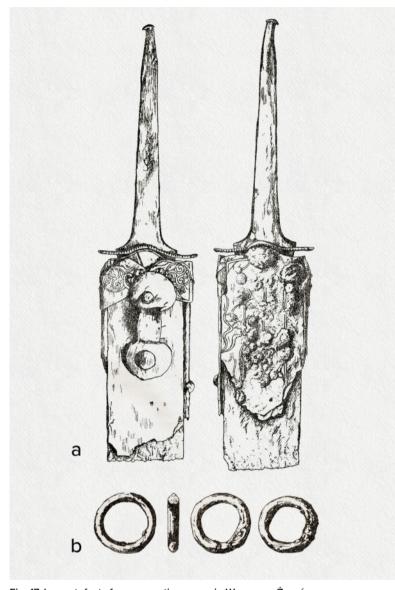


Fig. 17. Iron artefacts from cremation grave in Warszawa-Żerań: a – Celtic two-edged sword in the ornamented scabbard; b - three rings for attaching the sword at the belt.

After Jakimowiczowa 1930

# Jastorf culture's Gubin group societies in south-western Poland (3<sup>rd</sup>-1<sup>st</sup> c. BC)

Presumably datable a little later than the appearance of the first arrivals from northern Europe in Wielkopolska, Kujawy, and Mazowsze is the emergence of another local grouping of Jastorf culture, known as the Gubin group, located in south-western Poland, in the middle Odra drainage (named after the locality Gubin near the border with Germany) (Domański 1975). The origins of this unit are likely to be associated with the coming to this region during the first half of the 3<sup>rd</sup> c. BC of a population from the middle Elbe drainage, thus, from the area of present-day central-eastern Germany. Similarly as in the case of 'immigrants' from the northern zone of Jastorf culture, the arrivals from the middle Elbe region also moved into a region which was sparsely populated or even deserted by Early Iron Age societies. In any case, we have no finds from the middle Odra region we can attribute to Lusatian culture and Pomeranian culture which could be reliably dated to the late early pre-Roman period, i.e., the early 3<sup>rd</sup> c. BC.

In contrast to the dispersed finds that we can associate with the arrivals from northern Europe the sites of the Gubin group cluster within a specific territory, to be exact, in two areas: the Lusatian Neisse (Nysa Łużycka) drainage (left tributary of the Odra, its course marking the modern border between Poland and Germany), and on the middle Odra, in the area between present-day Głogów and Zielona Góra (Fig. 1, 2). And even if these two settlement enclaves are separated by a distance of a few score kilometres, they represent an identical culture model. It also needs stressing that although this grouping is also linked to Jastorf culture, the finds associated with it do not include forms such as crown-shaped neckrings and fire-dogs, present (as noted earlier) among the Brześć Kujawski type materials. This is because this grouping represents an evidently different culture model, manifested not only on the level of the production of objects, but also in the general character of the archaeological sources.

The Gubin group – in contrast to the finds of Jastorf culture communities originating from northern Europe already discussed - is known mostly from cemeteries. Settlements are recognized only in a fragmentary manner, making it hard to formulate more general conclusions on the subject of their layout and built environment (Domański 2010). In any case, it is thought that the dominant form of domestic structure was that of small dwellings (measuring at most ca. 3 x 3 m), which except for a slightly recessed area leave no traces in the ground. This has led us to surmise that their walls were built of wooden beams interlocked at the corners. Larger structures are an exception, their outline reconstructed from holes which survive from posts dug into the ground (structural elements of the walls). However, it is hard to conclude on this basis much about the settlement model of the Gubin group.

Important to note, on the other hand, is the large number of traces found in the western enclave of the Gubin group on the Lusatian Neisse documenting the manufacture of iron (Madera 2011). Despite the aforementioned problems with dating these sources, they are likely to attest to the relatively intensive production of iron in the pre-Roman period, since they were usually recorded in the context of materials of that grouping. The lack of larger centres like the one in Mazowsze attests to a different organization of production, presumably targeted more toward satisfying local demand. The presence of a relatively small quantity of smelting waste (e.g., slag) which is recorded, on the other hand, in many settlement sites may be interpreted either in terms of the general familiarity within the Gubin group environment with secrets of iron metallurgy or the operation in this territory of a group, possibly groups of itinerant founder-blacksmiths who supplied the dwellers of settlements they visited with iron and goods made of this material.

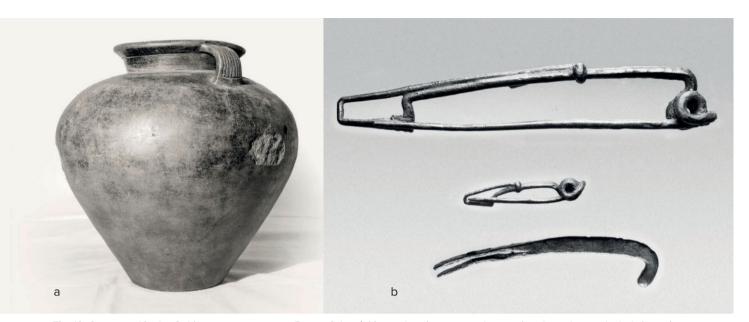


Fig. 18. Grave no. 1 in the Gubin group cemetery at Bytom Odrzański: a – clay cinerary urn; b – two iron brooches and a belt fastening. Courtesy of the Archaeological Museum – the Branch of Wrocław City Museum, inv. No. 103, 8573

The burial grounds of the Gubin group are a little better recognized. Mostly they are small sites, with a few to a dozen-odd graves, although larger cemeteries with 50–70 burials are also known (Domański 1975). This corresponds to the situation noted in the middle Elbe drainage, where there is a domination during this time of equally small burial grounds. Thus, in both regions, on the Elbe and on the Odra, cemeteries were used presumably by small communities, presumably with kinship ties. One evident difference is that in the territory of Poland in these burial grounds there is usually no evidence for the presence of graves attributed to the earlier local early Iron Age groupings, i.e., Lusatian culture and Pomeranian culture. A slightly different situation is observed in the cemetery at Domaniowice, one however that has yet to be fully analyzed (Kołodziejski 1973). From the limited information published on this subject it may be surmised that the youngest Pomeranian culture burials and the start of the use of this grave site by the population of the Gubin group were divided by a chronological gap of several decades at least. Once again, however, any closer conclusions are precluded by the problems in dating archaeological material attributed to the early Iron Age cultures. On the other hand, the use of the same burial ground suggests that at the time of the arrival of the newcomers from the Elbe region the sacred nature of

this site, established in the earlier tradition, was still alive, or possibly, still physically apparent (from surface markings in the cemetery).

Similarly as in the original homeland of Jastorf culture, the graves of the population of the Gubin group are mostly in the urned cremation rite. After cremation the burnt bones, together with dress accessories or personal effects if any, were picked out from the pyre debris and placed in a pottery vessel. At first jars were used for this purpose, often with a rusticated surface, and in the late pre-Roman period – carefully made vases or jugs, often similar to the vessels of the adjacent Przeworsk culture (Fig. 18:a, 19:a, 20:a; cf. Fig. 37, 39). There is evidence for a curious practice of deliberately breaking the handles of vessels meant for use as cinerary urns. There was also a tendency to cover the opening of the urn with an inverted smaller vessel – a bowl or cup (Fig. 19:a, 20:a). Such an array of vessels was set on the bottom of a small pit dug in the ground, and subsequently filled in. In the small number of pit burials, the cremation and metal objects – if there were any – were found resting on the bottom of the pit. We do not know whether the graves had any surface markers. Perhaps – in keeping with customs noted at times in the Elbe drainage – single stone or small stone structures were placed over the grave (Domański 1975: 77). The use of some

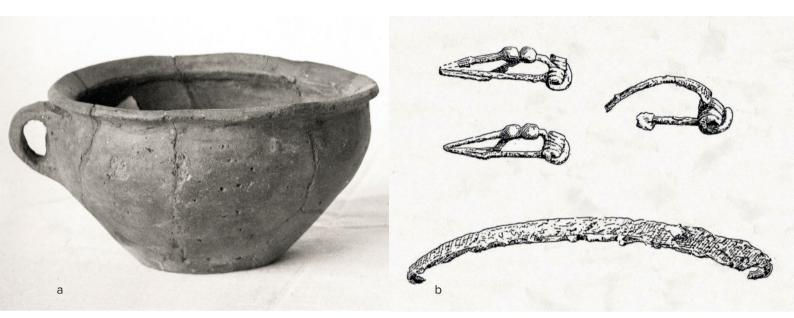


Fig. 19. Grave no. 2 in the Gubin group cemetery at Nowe Miasteczko: a – clay vessel covering the opening of cinerary urn; b – iron artefacts: pair of brooches with two bronze spherules on a bow, a brooch and a belt fastening.

Courtesy of the Archaeological Museum – the Branch of Wrocław City Museum, inv. No. 9070 (a); after Tackenberg 1929 (b)

sort of a mark visible in the field (but no longer recognizable today) may be supported by the fact that in the long-lasting cemetery at Luboszyce there were practically no graves with an earlier dating cut into by later burials.

The earliest female grave inventories contain brooches modelled on Celtic forms. They were mostly fully made of iron, although an occasional specimen may be decorated with applied bronze elements, usually spherical, cast onto the iron bow of the brooch (Fig. 19:b, 21:b). The female grave typically contained two, possibly three brooches (Fig. 18:b, 19:b). A characteristic element of the female costume is that of belt hooks (Fig. 18:b, 19:b, 21:c). These are oblong objects fashioned from a fragment of sheet iron, or an iron bar (more rarely, bronze) with a hook at each end, for fastening a belt made of organic materials. Female ornaments also include very rarely encountered lockrings made of decorated sheet bronze, apparently worn at the temples fastened to a cap or a hair ribbon. Another rare category of female ornaments is that of cast bronze neckrings, of penannular shape with expanded terminals (Fig. 21:a). This is one manifestation of the adoption within the Germanic societies originating from the Elbe region of an element of Celtic dress. The neckrings are evidently inspired by torques which have been discovered in women's graves of the La Tène culture. Another rare find, glass beads, also attests to contacts with the Celtic south (Kołodziejski 1973: 129, figs. 8–10).

Male graves, on the other hand, contain more modest furnishings. These usually consist of a single iron brooch (Fig. 20), and only rarely toiletry articles such as an iron razor or tweezers. The rule which distinguishes the burials in the Gubin group (and their Jastorf culture counterparts on the Elbe), from the burial customs of the La Tène culture on the one hand and Przeworsk and Oksywie cultures on the other, is the shortage of weapon graves. Only exceptionally did a burial contain an iron spearhead, a sword, or a spur (Domański 1975: 29-30, 31-32, 79). And it is seemingly no accident that – as in the case of the grave inventory containing a sword and a spur – these are elements of a warrior's equipment based on models deriving from the La Tène culture (similarly as the custom itself of furnishing the graves of warriors with items of weaponry). In any case, graves furnished in this manner appear not until the very end of the 2<sup>nd</sup> c. BC, thus, at the end of the existence of the Gubin group, when there is evidence for a stronger influence from Przeworsk culture in the material record. Imaginably, the small number of warrior burials could be evidence for the sporadic participation of men from the Gubin group in joint military action alongside Przeworsk culture men, when the former had the occasion to observe

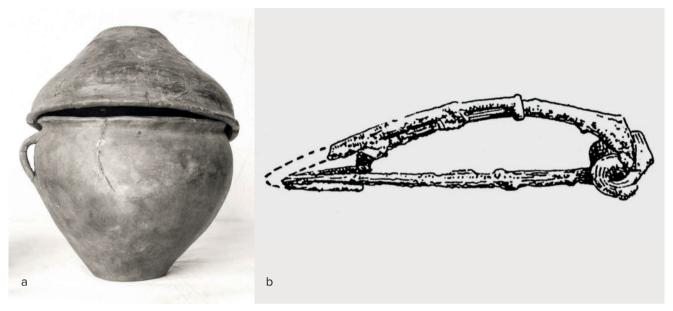


Fig. 20. Grave no. 3 in the Gubin group cemetery at Nowe Miasteczko: a – clay cinerary urn covered with a bowl; b – iron brooch Courtesy of the Archaeological Museum – the Branch of Wrocław City Museum, inv. No. 9071 (a); after Tackenberg 1929 (b)

ceremonies involving the ritual destruction of weapons prior to their deposition in the grave.

It is worth noting that both pottery (especially from the early phase of the Gubin group) and dress accessories, as well as the burial rite practiced within these societies, correspond quite closely to models known from the original Jastorf culture homeland in the middle Elbe drainage (Domański 1975: 97–100). Thus, similarly as in the case of Brześć Kujawski type materials, what happened here was not a transformation of earlier groupings, followers of Early Iron Age traditions, but the arrival of a new population who brought with them a culture model quite unknown to the earlier local tradition. Only around the turn of the 2<sup>nd</sup>/1<sup>st</sup> c. BC does the influence from the Przeworsk culture become more pronounced, recognizable both in the pottery – in the forms of the hand-made vessels and the thickening and faceting (profiling) of the vessel rims – and in the presence of a small number of weapon graves.

In contrast to Jastorf societies that we can trace to northern Europe, the Gubin group succumbed to 'Latenization' according to the same model as Jastorf culture in its original territory in the Elbe drainage. This involved in the first place the adoption of the Celtic model of dress, i.e., brooches based on the La Tène style design, but also the bronze neckrings with expanded terminals. On the other hand, the tradition of

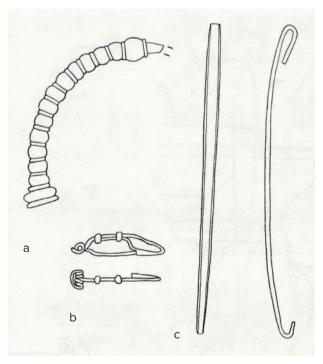


Fig. 21. Part of burial assemblage from grave no. 127 in the Gubin group cemetery at Luboszyce: a – fragment of bronze-iron neckring; b – iron brooch with two bronze spherules on a bow; c – iron belt fastening.

After Domański 1975

burying warriors with their military equipment, usually ritually destroyed, had only a marginal significance – and only during the late 2<sup>nd</sup>/1<sup>st</sup> c. BC. In comparison to the Jastorf culture centres in the middle Elbe drainage, the character of sources from the territory of the Gubin group, its location peripheral, is much more modest, e.g., only single finds of wheel-made Celtic pottery are recorded (Domański 2014: 304), unlike in the former territory.

The use of cemeteries of the Gubin group came to an end in the first decades of the 1st c. BC. This is a development observed also in the Elbe drainage, where approximately during the same age there is evident change in culture and settlement. This transition was associated with the shift of a part

of the Germanic population west- and southward (Godłowski 1978: 121–126). This fact is recorded in the Roman written sources when a part of the population of the Germanic tribes referred to as the Suebi invaded Gaul, indirectly creating the reasons for the conquest of this land by Julius Caesar. Did the societies identified with the Gubin group participate in these developments? We cannot answer this question if we wish to base our conclusions strictly on the evidence of the archaeological sources. In any case, it is certain that most of the Germanic population that had been settled for more than a hundred years in the middle Odra drainage left this area approximately at that time.

# A time of change – a time of men. Przeworsk culture societies in central and southern Poland (2<sup>nd</sup>–1<sup>st</sup> c. BC)

At the beginning of the 2<sup>nd</sup> c. BC, above all as a result of the growing Celtic influence, a new archaeological culture takes form, one named after a cemetery site discovered in the vicinity of the locality Przeworsk in south-eastern Poland. The territory of this culture includes almost all of southern and central Poland (except for areas under Celtic settlement and the Gubin group territory), which is fairly consistent with the zone where we find the highest frequency of the earlier Brześć Kujawski type materials (cf. Fig. 1, 2). While until this age, i.e., in the second half of the 3<sup>rd</sup> c. BC, the 'Latenization' of societies which we can trace back to the northern zone of Jastorf culture was expressed mostly as the adoption of the La Tène iron brooch forms, from the 2<sup>nd</sup> c. BC onwards increasingly strong Celtic influence resulted in a much deeper culture transformation (Dąbrowska 1988).

To start with, the production of iron becomes widespread, and this metal is used in the production on a mass scale - next to ornaments - of weaponry and tools modelled on objects from the La Tène culture environment. The Mazovian centre of metallurgy mentioned earlier comes into being - despite some occasional doubts raised to the contrary – presumably during the late pre-Roman period. Next to a small quantity of Brześć Kujawski type materials, the presence of Przeworsk culture pottery in the ironworking settlements in Mazowsze attests to the involvement of its population in this economic undertaking – and vast it was, given the realities of the day. Finds of Przeworsk culture pottery and radiocarbon dates from this period are also recorded in sites associated with the second great centre of metallurgy, in the Świętokrzyskie mountains, even if the time of its greatest growth would be not until the first centuries AD (Orzechowski 2013: 175, 177). It differed from the centre in Mazowsze most importantly by the method used to exploit the iron ore and the organization of the production process. Rather than coming from subsurface deposits (bog ore), the ore used in the Świętokrzyskie mountains centre was hematite, with a markedly higher iron content (which would make the production of iron from this ore more efficient), but is obtained from a greater depth, as much as several dozen metres below the surface. Consequently, it could be extracted only by mining, which was more labour-intensive and required better organization. Moreover, in the nearby ironworking settlements iron smelting furnaces, of a type known as slag-pit furnaces, have been recorded in a very orderly pattern. In the course of time they were arranged in regular rows, closely spaced, so as to put the space of the slag-pit furnace field to best possible use. The slag-pit furnace was a disposable furnace, once the smelting process was over, the raised structure of the slag-pit furnace – the chimney built of clay, was broken open to extract the bloom (sponge iron). The other product of the slag-pit furnace solidified in a hollow dug in the ground underneath the furnace (the so-called slag-pit) – a block of slag weighing a few dozen kilograms formed of impurities separated from the ore during the smelt. As a waste product, slag was not extracted from the ground, especially that – given its size – this would have been a labour-consuming operation. It was easier to leave it in the ground, and build a new furnace next to the one used earlier. This strategy would produce an organized, regular layout of the bloomery fields.

Both the more complicated method of extracting the ore by mining and the orderly arrangement of features in the production settlements prove that the production of iron in the centre found in the Świętokrzyskie mountains called for a much better organization of labour than was the case of sites in Mazowsze. Evidently, in both cases we have to accept the existence of a strong decision-making centre, able to organize and supervise the production of raw iron on such a scale. And although we lack evidence as yet from archaeological finds to locate in this region possible power centres datable to the

late pre-Roman period, without a doubt such a vast undertaking (requiring enormous outlays and faultless organization, not only of the mining and the smelting work, but also of the logistics of transporting the ready resource to markets etc.), had to be supervised by a high-ranking political authority.

Thus, based on the manner of operation of the iron metallurgy region in the Świętokrzyskie mountains, we may suspect – even at this early state – the existence in the territory of Przeworsk culture of some strong power centres. Their existence is intimated by minting centres in which gold, Celtic (!) coins were struck. Admittedly, these centres have been located in other parts of the country, i.e., in eastern Wielkopolska and in Kujawy thus, quite far from the Świętokrzyskie mountains (Rudnicki, Miłek, Ziąbka, Kędzierski 2009; Rudnicki, Dymowski 2015: 257–259). Nevertheless, the minting of gold coins has also been recorded in western Małopolska, in the territory of the Tyniec group, with a mixed, Przeworsk-Celtic population (Rudnicki 2012). Naturally, both centres of metallurgy discussed here could have been run from some other, as yet unrecognized centres.

It needs adding that iron was produced on a smaller scale at other locations too, and that traces of metallurgy have been discovered in 'ordinary' settlements, as well. In these cases, this production presumably was meant to satisfy the current demand, whereas in Mazowsze and in the Świętokrzyskie mountains iron was produced most likely for

export. The great demand for this resource within the Przeworsk culture environment on the one hand and its great supply on the other is indicated by hundreds, if not thousands, of late pre-Roman period grave inventories containing a larger number of items made of this metal.

The iron obtained went into the mass production of personal ornaments, weapons, and tools modelled on La Tène objects. Of the former the most notable are the diverse brooches, at first closely imitating the Celtic forms, subsequently featuring local, Germanic stylistic solutions. The details of many brooches indicate the existence of close contacts between Germanic and Celtic craftsmen, and the fact that the former (some of them?) seem to have acquired their skills under the guidance of Celtic experts (Maciałowicz 2015). Some of the dress accessories crafted by Przeworsk culture iron-smiths continue earlier, Jastorf traditions, such as belt hooks typical for the female dress (Fig. 22 – both specimens on the right). But in general, the dress accessories of the Przeworsk culture people remained equally modest, if not to say, austere, as those attributed to societies arrived from the northern zone of Jastorf culture which had undergone 'Latenization' approximately half a century earlier.

The effects of this second wave of 'Latenization' accomplished at the beginning of the  $2^{\rm nd}$  c. BC are even more apparent in the model of the military equipment (Bochnak 2005). The warriors from the Przeworsk culture environment



Fig. 22. Iron belt fastenings from the Przeworsk culture graves at Oblin and Kamieńczyk. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski





Fig. 24. Ritually bent two-edged iron sword, from the Przeworsk culture grave no. 13 at Kraszewo. The State Archaeological Museum in Warsaw. Photograph by M. Bogacki & M. Dąbski



Fig. 25. Ritually bent two-edged iron sword, from the Przeworsk culture grave no. 87 in Warszawa-Wilanów. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski

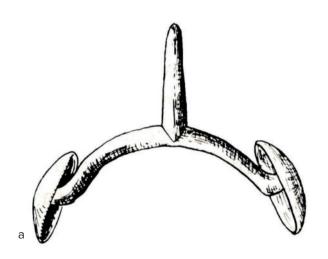




Fig. 26. Iron spurs discovered in the Przeworsk (a) and Oksywie (b) culture cemeteries: a – Stupsk; b – Podwiesk, The District Museum in Toruń. After Niewęgłowski, Okulicz 1970 (a); photograph by A. Maciałowicz (b)



Fig. 27. Iron shield-boss of the Celtic shield discovered in the Przeworsk culture cemetery at Piotrków Kujawski. The State Archaeological Museum in Warsaw (copy).

Photograph by M. Bogacki & M. Dabski

used two-edged swords ca. 1–1.2 m in length, the same as the swords used by the Celts (Fig. 23, 24). They were carried in scabbards made of sheet iron, customized to fit an individual sword (Fig. 25). In view of the high skills and specialized tools needed to forge these pieces of sheet iron it is reasonable to assume that all the sword-and-scabbard sets were the work of Celtic rather than Germanic iron-smiths (Bochnak 2014: 80–84). But how to explain the presence in the Przeworsk culture territory of a little less than 200 Celtic swords? Were they the effect of a mass import? The existence of Celtic mints in the Przeworsk culture territory mentioned earlier suggests that other workshops or production centres using the La Tène technology could also have functioned in the area under Ger-

manic settlement. This conclusion – even if it appears quite likely – must remain in the sphere of conjecture since at the time of writing we have no finds to prove our case.

Germanic warriors adopted from the La Tène culture also the use of spurs. Few finds discovered in Przeworsk culture graves are modelled on Celtic ones or actually are of Celtic origin (Fig. 26). Another rare kind of Celtic military 'imports' (a war booty?) are so called 'strip shield-bosses' made of iron – the only element of typical La Tène culture shield that usually stays preserved (Fig. 27). Among unique armoury of undoubtedly Celtic origin there is the iron helmet from Siemiechów in central Poland, used as an urn for cremated bones in the Przeworsk culture grave (Fig. 28).



Fig. 28. The Przeworsk culture grave no. 25 at Siemiechów: a – iron Celtic helmet, b – used as cinerary urn. Next to the helmet visible spearhead and ritually bent sword. a – The State Archaeological Museum in Warsaw (copy).

Photograph by M. Bogacki & M. Dąbski (a); after Jażdżewska 1986 (b)

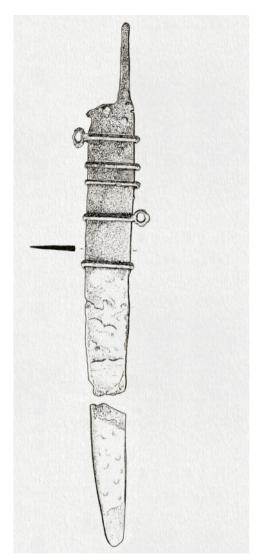


Fig. 29. Iron one-edged sword with the scabbard fittings, discovered in the Przeworsk culture grave no. 24 at Siemiechów.

After Jażdżewska 1988



Fig. 30. Iron shield-bosses with a spike, discovered in the Przeworsk culture graves at Kamieńczyk and Oblin. The State Archaeological Museum in Warsaw (copies).

Photograph by M. Bogacki & M. Dąbski



Fig. 31. Iron spear-heads decorated by selective etching, discovered in the Przeworsk culture cemeteries at Oblin and Kuznocin. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski

On the other hand, the shorter but usually somewhat wider, one-edged swords are evidently of a local, Przeworsk culture, authorship (Fig. 29). This was a regional, central and northern European form, one that finds no counterparts in the adjacent zone of the La Tène culture. The local blacksmiths also produced the special iron fittings of the wooden shield known as circular bosses. These were elements meant to strengthen the central part of the shield and protect the arm of the warrior who held it. The use of some shield-boss forms, particularly ones provided with a spike atop its dome,

suggests that Germanic warriors were not unfamiliar with using the shield as an offensive weapon (Fig. 30). Also of a local, Germanic production were metal points of shafted weapons, although their large size, and also the techniques used in decorating their surface by selective etching – which produced decorative designs – were another echo of Celtic influence (Fig. 31, 32:1). Thus, also in this case can we speak of connections on the technical level between craftsmen representing these two groups.



Fig. 32. Iron artefacts discovered in the Przeworsk culture grave no. I/1896 at Gołębiewo:

- 1 a spear-head decorated by selective etching together with a lance-shoe;
- 2 a shield-boss;
- 3 ritually bent two-edged sword in scabbard;
- 4 a fragment of unidentified artefact;
- 5 a rivet;
- 6 partially preserved brooch.

After Heydeck 1900



Fig. 33. Part of the Przeworsk culture burial assemblage from grave no. 36 at Wesółki: iron elements of weapons (a shield-boss, a spear-head), blacksmith's tools (iron tongs, a hammer, files, dies, punches, fragment of a stone hammer) and other iron artefacts (knives, fittings etc.). Institute of Archaeology and Ethnology, Polish Academy of Sciences, the Archaeological Station in Kalisz.

Photograph by A. Kędzierski



Fig. 34. Part of the Przeworsk culture burial assemblage from grave no. 8 at Gołębiewo: iron spear-head, a knife, a buckle and firemaking set. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski



Fig. 35. Part of the Przeworsk culture burial assemblage from grave no. 212 at Kamieńczyk: a – a pair of iron brooches; b – iron bracelet; c – iron needle and a spindle-hook; d – clay spindle-whorl. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski

Tool finds discovered in Przeworsk culture contexts include forms used in specialized crafts, namely files, hammers, dies, punches – used in ironworking (Fig. 33), and simple tools and functional objects, like axes, various knives, shears, razors, awls, needles, and fire-steels (Fig. 34, 35, 36). The artefacts of the former category copy Celtic forms, those of the latter could have been developed based on the same models (e.g., axes with a rectangular shaft, blade shears, knives with a ring at the end of the handle), or could be the effect of the continuation of indigenous crafts tradition (e.g., simple knives, razors, awls, needles). Needless to say most of these tools are thought to be associated with men's activity.

Last but not least, the effect of 'Latenization', which arguably is the most characteristic for Przeworsk culture, is the widespread custom of burying dead warriors with ritually destroyed weapons (Fig. 24, 25, 28:b, 32). To be precise, not only weaponry was destroyed deliberately, for on occasion tools were, too – and even personal ornaments, ones deposited in the grave together with the remains of the deceased. This was definitely the result of the adoption of the Celtic burial ritual (Dąbrowska 1988: 54). Obviously, the adoption of this sort of funerary behaviour, which would have involved the embracing of foreign beliefs, at least in terms of eschatology, could have come about only as a result of a direct contact of the Germanic tribes and the Celts.



Fig. 36. Iron artefacts from the Przeworsk culture grave no. 48 at Niedanowo: a set of three brooches, a knife, a needle and a fragment of an awl. The Museum of Warmia and Mazury in Olsztyn.

Photograph by A. Maciałowicz

Next to the strong compatibility with the La Tène culture models, Przeworsk culture inventory displays many evident references to the earlier Jastorf models. These are observed first of all in pottery, a highly conservative craft which in the light of archaeological sources is an important means of conveying the cultural tradition. These references are manifested not only by the similarity of pottery forms, but also their decoration (Fig. 37, 38, 39). Thus, the decoration of the Przeworsk vessels, which makes use of geometric motifs – quite often, the meander motif - appears to be a continuation of a tradition which is recorded at times in assemblages of Brześć Kujawski type pottery of the younger horizon (cf. Fig. 5:f). The same may be said about the other feature characteristic for the Przeworsk wares – namely, the presence of distinctly thickened and everted rims, additionally profiled in a unique manner (facetted) (Fig. 37:b, 38:b, 39; cf. Fig. 5).

Although this subject raises debate among archaeologists, it should be stated plainly that both the inventory of the Przeworsk culture vessels forms and the characteristic modelling of their rims and handles, as well as their decoration, are recognizable as a legacy of Brześć Kujawski type pottery of the younger phase (Grygiel 2013: 44; cf. different opinion of Dąbrowska 2008: 102, 115). This development is especially apparent in settlement sites which have yielded late pottery

assemblages of the Brześć Kujawski type and the earliest forms of Przeworsk culture vessels (e.g., Bednarczyk, Kośko 2004; Czerniak, Gąssowski 2008; Machajewski, Pietrzak 2008). In any case, a further weighty argument for the evolutionary transformation of Jastorf culture in the Polish Lowland into the Przeworsk culture, which took place within the same Germanic society, is no less than the fact of the occurrence of pottery material of these two archaeological groupings within the same settlement site. It also needs pointing out that Przeworsk culture pottery does not find any counterparts in the local, early Iron Age cultures, e.g., Lusatian and Pomeranian-Cloche cultures. These represent two entirely different pottery traditions. And only the appearance in the Polish Lowland of Brześć Kujawski type pottery, and its evolution, can explain the origin of the unique forms and decoration of the wares of Przeworsk culture. In any case, it is also possible to indicate vessel forms which enter the stock of the pottery forms of the newly emerged culture in an unmodified shape, directly from the Jastorf inventory, e.g., bowls with drooping handles (Fig. 40; cf. Fig. 4) (Maciałowicz 2004; Dąbrowska 2008: 69-72; Woźniak 2013: 20).

The next piece of evidence to support continuity of the northern European traditions within the Przeworsk culture environment is a crown-shaped neckring discovered in



Fig. 37. The Przeworsk culture clay vessel (a jug) from grave no. 323 at Kamieńczyk: a – a general view; b – details of the decoration and a facetted rim. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski



Fig. 38. The Przeworsk culture clay vessel (a jug) from grave no. 5/69 at Drohiczyn-Kozarówka, decorated with: a – geometric motifs; b – details of the motif and a facetted rim. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski



Fig. 39. The Przeworsk culture clay vessels: a – a cup from grave no. 89 at Kamieńczyk, decorated with a meander motif; b – a bowl from grave no. 2/69 at Drohiczyn-Kozarówka. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dabski



Fig. 40. Clay bowls with drooping handles, from the Przeworsk culture graves at Oblin: a – grave no. 95; b – grave no. 128a. The State Archaeological Museum in Warsaw.

Photograph by M. Bogacki & M. Dąbski

a Przeworsk culture burial in the cemetery at Błonie in eastern Małopolska (Woźniak 2013: 21). This grave inventory is one of the earliest in that cemetery as one can assume basing on its horizontal stratigraphy. As was noted earlier, crown-shaped neckrings were no ordinary personal ornament for the Jastorf societies, but objects with a special, also symbolic significance. Consequently, the discovery of such an artefact in a Przeworsk culture inventory suggests the unity of this tradition.

On the other hand, the process of 'Latenization' was so strong from the 2<sup>nd</sup> c. BC onwards that a large part of the earlier, northern European traditions of the Germanic arrivals in the Polish Lowland was almost fully effaced and transformed into the Przeworsk culture. Thus our best evidence for the continuity between Jastorf culture (Brześć Kujawski type) and the newly emerged culture comes from pottery, a traditional craft not very receptive to foreign models, and by the occupa-

tion – despite the changes in the material and spiritual culture – of the same settlement sites. In any case, both the forms of settlement (Grygiel 2013: 44) and methods of subsistence are in these two groupings very similar, consequently there is no need to describe them again at this point.

Changes to the dimensions of spiritual culture, and also to the structure of settlement, are evidenced by the fact of the setting up of new, this time long-lasting cemeteries. Some of the identified grave sites have as many as a few hundred graves datable to the late pre-Roman period and it needs to be stressed that some continue into the Roman period (Dąbrowska 1988; 2008). On the one hand, this indicates, a stabilization and growing density of the settlement network; on the other, the rise of new, larger social structures of communities which used a given cemetery.

As was mentioned earlier, in the cemeteries the dominant form are pit cremation burials containing the cremated human remains interspersed with the pyre debris and objects deposited on the pyre. At the beginning of the late pre-Roman period urned burials are relatively few and are best interpreted either as a continuation of earlier Jastorf customs or as an echo of local traditions of the early Iron Age groupings.



Fig. 41. Wheel-made, painted Celtic vessel, from the Przeworsk culture grave no. 11/1944 at Zadowice. The Archaeological Museum in Poznań.

Photograph by A. Kędzierski

Some of the grave inventories contain a larger quantity of broken pottery, some of which bears evidence of having been in the pyre, presumably after being used in the burial ceremony. If we gave free rein to our imagination, soaring beyond the boundaries imposed by the archaeological sources, we could speculate that these vessels were used by the assembled mourners who, having used them to e.g., drink a toast to the soul of the deceased, hurled them into the flames of the funeral pyre where they broke and next were also burnt. Weapons, tools, and at times also personal ornaments were also ritually destroyed, which usually means that they were deliberately bent out of shape, or broken. It is not clear whether this was done before depositing them on the pyre or only after it had gone out. Some authors have stressed that iron swords were more easy to bend after they had become unhardened in the high temperatures of the pyre. Still, many swords are bent in such a fanciful manner that this purpose cannot have been achieved without the resort to blacksmith's tools (Fig. 25, 28:b, 32:3).

It is worth considering at this point how the relatively dispersed Jastorf culture settlement could have given rise during the 2<sup>nd</sup> c. BC to a new cultural phenomenon that is recorded with some frequency far and wide across Poland (cf. Fig. 1, 2). For it seems that successive groups from the north-west may have continued migrating to the territory of Poland, something that is suggested by the presence of certain artefacts. The magnet attracting new settlers to the area could have been the apparent economic prosperity observed in the territory of Poland, the result of contact with the Celts (associated e.g., with the operation of long-distance exchange routes), but also of the demand for mercenary forces directed to service in the armies in the Mediterranean world. The focus of this increased activity in the 2<sup>nd</sup> c. BC was presumably the Celtic settlement site at Nowa Cerekwia (Maciałowicz, Rudnicki, Strobin, in this volume).

Moreover, the population of Przeworsk culture – in the eastern part of the country in particular – may have included some groups continuing the early Iron Age tradition. However, in their case, the acculturation was so strong as to make the earlier elements barely recognizable, limited to the survival of the tradition associated with e.g., setting the funerary urn about with fragments of large vessels with a rusticated surface ('pseudo-cloche' behaviour) (Dąbrowska 1988: 63; 2008: 95). Interestingly, this local cultural substrate becomes discernible in the archaeological material not until the 1st c. BC, that is, in the late phase of the late pre-Roman period when Przeworsk

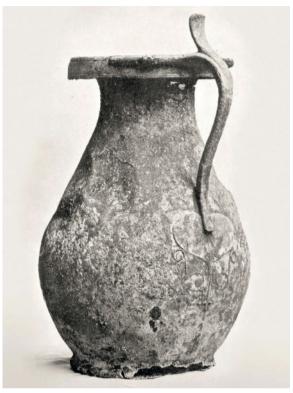


Fig. 42. Bronze jug of Italic provenance, used as a cinerary urn in the Przeworsk culture grave no. VIII at Siemiechów.

After Erzepki, Kostrzewski 1915



Fig. 43. Bronze bucket (situla) of Italic provenance, used as a cinerary urn in the Przeworsk culture grave no. 2/M at Niechmirów-Mała Wieś.

After Kufel-Dzierzgowska, Wielowiejski 1986

culture is already a fully-fledged phenomenon. It seems therefore that the early Iron Age societies not so much took part in the formation of the Przeworsk culture as they adopted the ready model, evolved mainly within the population groups following the northern European traditions.

Thus, there is everything to suggest that the Celtic influence referred to as 'Latenization' intensified during the 2<sup>nd</sup> c. BC to the point that it not only brought about an almost full acculturation of early Iron Age societies still lingering in the territory of Poland, but also caused sweeping changes to the culture model of the Germanic population which even earlier, around the mid-3<sup>rd</sup> c. BC, had adopted certain elements of La Tène culture. It is difficult to explain the mechanism which led to such intense change in both material and spiritual culture. It seems that the essential factor was the entering by the Germanic and the Celtic societies into direct and close interaction. The place, and at the same time, proof of these contacts would presumably be zones with a mixed settlement, as in the case of Śląsk, e.g., the settlement at Nowa

Cerekwia, but also in Małopolska, where the Tyniec group took form, having a mixed Przeworsk-La Tène character (Fig. 2). This Celto-Germanic coexistence could have come about, on a smaller scale, in other parts of the country, too. The presence of the Celts in different regions of central Poland is indicated by various classes of archaeological finds, in the first place, wheel-made pottery typical for the La Tène culture, initially the graphite wares, and later painted pottery (Fig. 41) (Bochnak 2014: 161–166).

An additional factor strengthening bilateral relations could have been the taking up of contacts of a commercial nature, supported by the existence of the centre at Nowa Cerekwia, and after its decline at the end of the 2<sup>nd</sup> c. BC, by some other major centres on the territory of the Tyniec group. It is worth recalling at this point the mints engaged from the late 2<sup>nd</sup> century BC in striking gold Boii coins. These mints are identified within the Przeworsk culture environment in the Kujawy region and in eastern Wielkopolska, and were presumably operated by Celtic craftsmen. Finally, also worth

serious consideration is the possibility of military expeditions undertaken jointly by Celtic and Germanic warriors which would have created favourable conditions for the spread of La Tène weaponry and burial ritual involving the deposition in warriors' graves of their ritually destroyed weapons. In this regard a vital role could have been played at first by the centre at Nowa Cerekwia, which has been interpreted as a mustering point of sorts (Maciałowicz, Rudnicki, Strobin, in this volume).

The complex nature of these relations, which presumably led to the rise of Celto-Germanic structures of a political character, is manifested also by the Celtic name of the tribe (or a confederation of tribes) – the Lugii, which in classical sources from the 1<sup>st</sup>–2<sup>nd</sup> c. AD is used to describe the Germanic population of southern and central Poland (Kolendo, Płóciennik 2015: 47–53).

Worth recalling in the context of the military interpretations invoked here is the number of Celtic weapons, or weapons based on Celtic models, recorded in Przeworsk culture graves. This was an important element of 'Latenization', connected both with the activity of warriors and with displaying their status in the burial rite. Thus, it may be concluded that it explains the character of this process to a large degree. In most Przeworsk culture cemeteries the percentage of graves furnished with weapons is around 10–20%, but in some it is even as much as ca 30% or more (Maciałowicz, Woźniak 2015: 240, fig. 13). This shows an evident preference for highlighting, using attributes of this sort, the role played by military activity in the life of men.

To judge by the grave furnishings, Przeworsk culture society appears to be fairly egalitarian, although it is easy to observe a tendency, intensifying over time, toward highlighting the distinct social roles of the two sexes, with emphasis placed on the high position of men – most of all warriors, but also e.g., blacksmiths. Starting from the late 2<sup>nd</sup> c. BC we can observe a group of burials of both these 'professional' groups (mostly, warriors), which stand out by the richness of their grave inventories. Not only do they include a wealth of iron objects (dress accessories, weapon sets, or sets of specialized tools) but at times also luxury goods of a non-local - Celtic or Roman - provenance. In the first place, there are the large bronze vessels - cauldrons, buckets (situlae) and jugs – used normally as cinerary urns holding the cremated human remains (Fig. 42, 43). This suggests that the social elite, at least those recognizable in the grave finds, had emerged first of all within the warrior group, as well as presumably within the circle of qualified metallurgists.

In the case of women the effects of 'Latenization' are limited – particularly in the early stages of the Przeworsk culture – to those aspects of culture which they share with the men: the use of iron in the production of simple tools, the selection of dress accessories mostly consisting of a single brooch, and the custom of the deposition of ornaments and personal items in the grave (Fig. 35, 36). On the other hand, in the Przeworsk culture environment there is no evidence for branches of crafts associated in the Celtic sphere mostly with the manufacture of female dress accessories e.g., glassmaking, enameling, or bronzeworking even. The two latter especially had been adopted by the societies of Jastorf culture from the Elbe and the Odra region, relatively close to the Przeworsk ones. As such, the female dress in Przeworsk culture appears quite plain - as compared to the adjacent archaeological cultures.

To some extent this gap was filled at the end of the late pre-Roman period by an influx of goods from the south, such as glass beads and different kinds of pendants and bracelets imported from both the La Tène culture and Dacian territory (Bochnak 2014). It needs stressing, however, that these imported objects did not enter the Przeworsk culture inventory for good: it remained lacking in typically female ornaments - except for the relatively simple iron belt hooks and bracelets (in any case, quite rare; Fig. 22, 35:b). This fact shows that the population of the Przeworsk culture adopted many Celtic models that in the first place related to those spheres of human activity that traditionally are associated with men. On the other hand, in the case of women the developments associated with the 'Latenization' are rather modest, limited to the use of iron brooches and highlighting of the social role of this sex through the deposition in graves of articles associated with traditionally female activities, i.e., implements used in spinning thread and in sewing (clay spindle-whorls, iron needles, and awls), and possibly, objects associated with the pottery craft (stone polishers) (Fig. 35, 36). This tendency, legible in the grave finds, to emphasize the different social roles of the two sexes is sustained within the Przeworsk culture society also during the Roman period (Kontny, in this volume).

In conclusion, the cultural model taken from the Celtic world, manifested by special treatment accorded to weaponry in the burial rituals, spread during the last century BC also to other regions of central and northern Europe settled by Germanic tribes. It seems that an important role in propagating this model – one that was not limited, after all, only to the ritual sphere, but also attested to something more

serious, to a universal affirmation of this new mode of career, made by *manu militari* which brought major (the greatest?) social prestige – was played by the population of Przeworsk culture. Through its agency a similar change was produced also among the Balt peoples who had settled the area of present-day Mazury. The archaeological Bogaczewo culture which took form here around the birth of Christ has many features compatible with Germanic cultures (Nowakowski 2002: 137; Bitner-Wróblewska, Rzeszotarska-Nowakiewicz, in this volume). The graves of this newly emerged culture have yielded diverse categories of weaponry that is compatible with Przeworsk forms (shield bosses, spearheads, spurs). A typical element observed in male grave inventories are now iron belt buckles with an elongated spike, and fire-making sets, based

on the Przeworsk models known from the adjacent region of northern Mazowsze (cf. Fig. 34). The appearance in Mazury not only of these objects themselves, but also of the skill of their manufacture by local craftsmen, and last but not least, the practice of weapon deposition in graves confirm the relatively intimate relations with the population of the Przeworsk culture, based presumably on the organization of joint undertakings of an armed character (Maciałowicz, in print).

Thus, it may be concluded that the beginning of the late Iron Age was a period of major demand for warfare and that the culture model involving participation in the economic benefits it easily produced transcended ethnic and cultural barriers, as may be seen in the example of Celto-Germanic and, later, Germano-Balt contacts.

## **Bibliography**

- Asingh P., Lynnerup N. (eds.) 2007. *Grauballe Man. An Iron Age Bog Body Revisited*. Jutland Archaeological Society Moesegaard, Moesgaard Museum, Højbjerg [=Jutland Archaeology Society Publications 49].
- Babeş M. 1993. Die Poieneşti-Lukaševka-Kultur. Ein Beitrag zur Kulturgeschichte im Raum östlich der Karpaten in den Jahrhunderten vor Christi Gebur. Dr. Rudolf Habelt GmbH, Bonn [=Saarbrücker Beiträge zur Altertumskunde 30].
- Bednarczyk J., Kośko A. (eds.) 2004. *Od długiego domu* najstarszych rolników do dworu staropolskiego. Wydawnictwo Poznańskie, Poznań.
- Bochnak T. 2005. *Uzbrojenie ludności kultury przeworskiej* w młodszym okresie przedrzymskim. Wydawnictwo Uniwersytetu Rzeszowskiego, Rzeszów.
- Bochnak T. 2014. Importy celtyckie w kulturze przeworskiej i oksywskiej na ziemiach polskich w młodszym okresie przedrzymskim. Zróżnicowanie drogi napływu kontekst kulturowy. Wydawnictwo Uniwersytetu Rzeszowskiego, Rzeszów.
- Bohnsack D. 1938. Die Burgunden in Ostdeutschland und Polen während des letzten Jahrhunderts v.Chr. Curt Kabitzsch Verlag, Leipzig [=Quellenschriften zur ostdeutschen Vor- und Frühgeschichte 4].
- Brandt J. 2001. Jastorf und Latène. Kultureller Austausch und seine Auswirkungen auf soziopolitische Entwiklungen in der vorrömischen Eisenzeit. Verlag Marie Leidorf GmbH, Rahden/Westf. [=Internationale Archäologie 66].
- Czerniak L., Gąssowski J. (eds.) 2008. *Osada wielokulturowa* w Łękach Górnych, gm. Krzyżanów, woj. łódzkie.
  Akademia Humanistyczna im. A. Gieysztora, Pułtusk [=Via Archaeologica Pultuskiensis II].
- Dąbrowska T. 1986. Stan i potrzeby badań nad młodszym okresem przedrzymskim w Polsce. In: K. Godłowski, R. Madyda-Legutko (eds.), *Stan i potrzeby badań*

- nad młodszym okresem przedrzymskim i okresem wpływów rzymskich w Polsce: 57-71. Uniwersytet Jagielloński, Kraków.
- Dąbrowska T. 1988. Bemerkungen zur Entstehung der Przeworsk-Kultur. *Praehistorische Zeitschrift* 63: 53-80.
- Dąbrowska T. 2008. Młodszy okres przedrzymski na Mazowszu i zachodnim Podlasiu. Zarys kulturowo-chronologiczny. *Materiały Starożytne i Wczesnośredniowieczne* VII: 3-246.
- Domański G. 1975. *Studia z dziejów środkowego Nadodrza*w III–I wieku p.n.e. Ossolineum, Wrocław Warszawa –

  Kraków Gdańsk.
- Domański G. 2010. Siedlungen der Gubener Gruppe. In: M.

  Meyer (ed.), Haus Gehöft Weiler Dorf. Siedlungen
  der Vorrömischen Eisenzeit im nördlichen Mitteleuropa:
  157-168. Verlag Marie Leidorf GmBH, Rahden/Westf.,
  [=Berliner Archäologische Forschungen 8].
- Domański G. 2014. Die Gubener Gruppe. Kontakte zwischen der Jastorf- und der Przeworskultur. In: J. Brandt,
  B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa: 303-312. Archäologisches Museum Hamburg, Hamburg.
- Dzieduszycki W., Makiewicz T., Sobucki A. 1998. Nowa Wieś, st. 1 i 12, gmina Bledzew, GAZ nr 43/43a, AZP 51-12: 7 i 55. In: R. Mazurowski (ed.), *Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego. Tom I: Ziemia lubuska*: 117-181. Wydawnictwo Poznańskie, Poznań.
- Dzięgielewski K., Dzięgielewska M. 2012. Podłęże, Fundstelle 17, Polen. In: S. Sievers, O.H. Urban, P.C. Ramsl (eds.), Lexikon zur keltischen Archäologie: 1500-1501. Verlag der Österreichischen Akademie der Wissenschaften, Wien.
- Erzepki B., Kostrzewski J. 1914. *Album zabytków*przedhistorycznych Wielkiego Księstwa Poznańskiego

- zebranych w Muzeum Towarzystwa Przyjaciół Nauk w Poznaniu III. Wydawnictwo Towarzystwa Przyjaciół Nauk, Poznań.
- Erzepki B., Kostrzewski J. 1915, Album zabytków przedhistorycznych Wielkiego Księstwa Poznańskiego zebranych w Muzeum Towarzystwa Przyjaciół Nauk w Poznaniu IV. Wydawnictwo Towarzystwa Przyjaciół Nauk, Poznań.
- Godłowski K. 1978. Zu Besiedlunsveränderungen in Schlesien und den Nachbarräumen während der jüngeren vorrömischen Eisenzeit. In: M. Gedl (ed.), Beiträge zum Randbereich der Latènekultur: 107-133. Państwowe Wydawnictwo Naukowe, Warszawa – Kraków [=Zeszyty Naukowe Uniwersytetu Jagiellońskiego CCCCLXXXV -Prace Archeologiczne 26].
- Grabarek A. 2011. Grób jastorfski z młodszego okresu przedrzymskiego z miejscowości Wilcza Wólka, pow. piaseczyński. Światowit VIII (XLIX)/B, 2009-2010 (2011): 69-75.
- Grane Th. 2003. Roman sources for the geography and ethnography of Germania. In: L. Jørgensen, B. Storgaard, L. Gebauer Thomsen (eds.), The spoils of victory – The north in the shadow of the Roman Empire: 126-147. Nationalmuseet [Copenhagen].
- Grygiel M. 2004. Problem chronologii i przynależności kulturowej materiałów o charakterze jastorfskim z Brześcia Kujawskiego, woj. kujawsko-pomorskie. w świetle ostatnich badań nad problematyką okresu przedrzymskiego w Polsce. In: H. Machajewski (ed.), Kultura jastorfska na Nizinie Wielkopolsko-Kujawskiej: 13-82. Stowarzyszenie Naukowe Archeologów Polskich, Oddział w Poznaniu, Instytut Prehistorii Uniwersytetu im. Adama Mickiewicza w Poznaniu, Poznań.
- Grygiel M. 2013. The Jastorf Culture on the Polish Lowland. In: Z. Woźniak, M. Grygiel, H. Machajewski, A. Michałowski, The Jastorf Culture in Poland: 23-46. Archaeopress, Oxford [=BAR International Series 2579].
- Heydeck J. 1900. Ein Gräberfeld aus der la-Tène Periode bei Taubendorf, Kreis Neidenburg. Sitzungsberichte der Altertumsgesellschaft Prussia 21 (1896-1900): 52-57.
- Jakimowiczowa Z. 1930. Miecz celtycki z Żerania, w powiecie warszawskim. In: J. Kostrzewski (ed.), Księga pamiątkowa ku uczczeniu siedemdziesiątej rocznicy urodzin prof. dr. Włodzimierza Demetrykiewicza: 291-300. Polskie Towarzystwo Prehistoryczne, Poznań.

- James S. 1998. Exploring the World of Celts. Thames and Hudson, London.
- Jażdżewska M. 1986. Ein römischer Legionärshelm aus Polen. Germania 64: 61-73.
- Jażdżewska M. 1988. Najciekawsze obiekty na stanowisku kultury przeworskiej w Siemiechowie nad górną Warta. Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi. Seria Archeologiczna 32: 109-142.
- Kaczanowski P., Kozłowski J.K. 1998. Najdawniejsze dzieje ziem polskich. In: Wielka historia Polski 1. Fogra Oficyna Wydawnicza, Kraków.
- Kaczor W., Żółkiewski M. 2014. Osadnictwo z okresu przedrzymskiego na stanowisku nr 8 w Grabkowie, gm. Kowal, woj. kujawsko-pomorskie. Zarys problematyki. Wielkopolskie Sprawozdania Archeologiczne 15 (2014): 71-94.
- Kaul F., Martens J. 1995. Southeast European influences in the Early Iron Age of Southern Scandinavia. Gundestrup and the Cimbri, Acta Archaeologica 66: 111-161.
- Kolendo J. 2009. Ausmaß und Charakter der Ausdehnung des Reiches von Marbod nach Norden. In: V. Salač, J. Bemmann (eds.), Mitteleuropa zur Zeit Marbods: 67-74. Archeologický ústav Akademie věd České republiky, Vor und Frühgeschichtliche Archäologie der Rheinischen Friedrich-Wilhelms-Universität Bonn, Praha Bonn.
- Kolendo J., Płóciennik T. 2015. Vistula amne discreta. Greckie i łacińskie źródła do najdawniejszych dziejów ziem Polski. Ośrodek Badań nad Antykiem Europy Południowo-Wschodniej, Uniwersytet Warszawski, Warszawa.
- Kołodziejski A. 1973. Badania cmentarzyska w Domaniowicach, pow. Głogów w latach 1964–1971. Sprawozdania Archeologiczne XXV: 113-134.
- Krüger B. 2003. Die Germanen. Mythos Geschichte Kultur – Archäologie. Beier & Beran. Archäologische Fachliteratur, Langenweissbach [=Beiträge zur Ur- und Frühgeschichte Mitteleuropas 29].
- Kufel-Dzierzgowska A., Wielowiejski J. 1986. Neufund eines Bronzeeimers mit Delphinattaschen von Niechmirów-Mała Wieś, Woj. Sieradz, Polen. Germania 64: 158-167.
- Machajewski H., Pietrzak R. (eds.) 2008. Poznań-Nowe Miasto. Źródła archeologiczne do studiów nad pradziejami i wczesnym średniowieczem dorzecza środkowej Warty, Archeostrada. Studia i materiały z badań

- wykopaliskowych na autostradzie A2 odcinek wielkopolski II. Wydawnictwo Poznańskie, Poznań.
- Maciałowicz A. 2004. *Dwie interesujące misy z cmentarzyska kultury przeworskiej w Suchodole, pow. sochaczewski ślad kontaktów wzdłuż tzw. szlaku bastarneńskiego?*: 43-60. Instytut Archeologii Uniwersytetu Warszawskiego, Warszawa [=*Barbaricum 7*].
- Maciałowicz A. 2011. Pomorze Gdańskie na przełomie starszego i młodszego okresu przedrzymskiego w świetle analizy zewnętrznych oddziaływań kulturowych. In: M. Fudziński, H. Paner (eds.), Między kulturą pomorską a kulturą oksywską. Przemiany kulturowe w okresie lateńskim: 79-120. Muzeum Archeologiczne w Gdańsku, Gdańsk.
- Maciałowicz A. 2014. Über die Ostsee. Jastorfeinflüsse im Westbaltischen Kulturkreis an der Wende von der älteren zur jüngeren vorrömischen Eisenzeit im Lichte der Funde aus dem ehemaligen Ostpreußen", (-en. In:) J. Brandt, B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa, Archäologisches Museum Hamburg, Hamburg 2014, 347–365.
- Maciałowicz A. 2015. Handwerk, Handel und Heirat? Neues über Kontakte der Boier mit den Germanen anhand von Fibelfunden. In: M. Karwowski, V. Salač, S. Sievers (eds), *Boier zwischen Realität und Fiktion*: 273-293. Dr. Rudolf Habelt GmbH, Bonn [=Kolloquien zur Vor- und Frühgeschichte 21].
- Maciałowicz A. in print. Kultura przeworska na północnym Mazowszu w młodszym okresie przedrzymskim i jej związki z ugrupowaniami Bałtów Zachodnich. In: S. Wadyl (ed.), *Materiały do archeologii Warmii i Mazur 2*.
- Maciałowicz A., Nowakowska M. 2006. Naszyjniki tzw. koronowate z Kluczewa i Lochstädt. Przyczynek do badań kontaktów Sambii i północnego Mazowsza w młodszym okresie przedrzymskim. In: W. Nowakowski, A. Szela (eds.), Pogranicze trzech światów. Kontakty kultur przeworskiej, wielbarskiej i bogaczewskiej w świetle materiałów z badań i poszukiwań archeologicznych: 321-334. Instytut Archeologii Uniwersytetu Warszawskiego, Warszawa [=Światowit Supplement Series P: Prehistory and Middle Ages XIV].
- Maciałowicz A., Woźniak M. 2015. Vanishing weapons. The cemetery at Kleszewo and 'pacifistic' burial customs in the Przeworsk Culture during the Late Pre-Roman

- Period. In: S. Wefers, M. Karwowski, J. Fries-Knoblach, P. Trebsche, P.C. Ramsl (eds.), *Waffen Gewalt Krieg*: 229-269. Beier & Beran. Archäologische Fachliteratur, Langenweissbach [=Beiträge zur Ur- und Frühgeschichte Mitteleuropas 79].
- Madera P. 2011. Ślady hutnictwa żelaza na obszarze grupy gubińskiej kultury jastorfskiej. In: G. Domański (ed.), "Nadodrze w starożytności" konferencja Grabice, 23–30 czerwca 2004 roku: 45-60. Wydawnictwo Fundacji Archeologicznej, Zielona Góra.
- Martens J. 1998. Local Development or Foreign Influences.
  On the Late Pre-Roman Iron Age of North Jutland
  In: J. Ilkjær, A. Kokowski (eds.), 20 lat archeologii
  w Masłomęczu. II: Goście: 157-193. Wydawnictwo
  Uniwersytetu Marie Curie-Skłodowskiej, Lublin.
- Martens J. 2010. Pre-Roman Iron Age Settlements in Southern Scandinavia. In: M. Meyer (ed.), Haus Gehöft Weiler Dorf. Siedlungen der Vorrömischen Eisenzeit im nördlichen Mitteleuropa: 229-250. Verlag Marie Leidorf GmBH, Rahden/Westf. [=Berliner Archäologische Forschungen 8].
- Mazurek W. 2001. Materiały typu jastorfskiego ze stanowiska 5 w Wytycznie, gm. Urszulin, woj. lubelskie. *Wiadomości Archeologiczne* LIV (1995–1998): 49-57.
- Michałowski A. 2010. Die Siedlungen der Jastorf-Kultur in Großpolen. In: M. Meyer (ed.), Haus Gehöft Weiler Dorf. Siedlungen der Vorrömischen Eisenzeit im nördlichen Mitteleuropa: 169-198., Verlag Marie Leidorf GmBH, Rahden/Westf. [=Berliner Archäologische Forschungen 8].
- Michałowski A., Teska M. 2012. Nowe odkrycia figurek Feuerböcke z terenów ziem polskich. *Folia Praehistorica Posnaniensia* XVII: 319-331.
- Niewęgłowski A., Okulicz J. 1970. Cmentarzysko z okresów późnolateńskiego i rzymskiego w miejscowości Stupsk-Kolonia, pow. Mława. *Wiadomości Archeologiczne* XXX (1964): 269-280.
- Nowakowski W. 2002. Vorrömische Militaria der Przeworsk-Kultur im westbaltischen Gebiet. In: C. Carnap-Bornheim J. Ilkjær, A. Kokowski, P. Łuczkiewicz (eds.), Bewaffung der Germanen und ihrer Nachbarn in den letzten Jahrhunderten vor Christi Geburt. Akten Internationalen Tagung in Nałęczów, 23. bis 25. September 1999: 137-146. Wydawnictwo Uniwersytetu Marie-Curie Skłodowskiej, Lublin.

- Orzechowski Sz. 2013. Region żelaza. Centra hutnicze kultury przeworskiej. Wydawnictwo Uniwersytetu Jana Kochanowskiego, Kielce.
- Rudnicki M. 2012. Nummi Lugiorum statery typu krakowskiego. Wiadomości Numizmatyczne LVI (1): 1-82.
- Rudnicki M., Dymowski A. 2015. Niekończąca się historia - znaleziska monet antycznych z Kujaw. Biuletyn Numizmatyczny 4 (380): 241-267.
- Rudnicki M., Miłek S., Ziąbka L., Kędzierski A. 2009. A Celtic mint near Kalisz. Wiadomości Numizmatyczne LIII (2): 123-145.
- van der Sanden W. 1996. Mumien aus dem Moor. Die vor- und frühgeschichtlichen Moorleichen aus Nordwesteuropa. Batavian Lion International, Amsterdam.

- Tackenberg K. 1929. Urnengräber der Spätlatènezeit aus Niederschlesien. Altschlesien 2/3: 241-250.
- Waldhauser J. 1988. Keltische Gräberfelder in Böhmen. Bericht der Römisch-Germanischen Kommission 68 (1987):
- Woźniak Z. 2013. The Middle of the 1st Millennium. The Role of Celts and Jastorf Culture in Cultural and Ethnic Changes in the Lands of Poland in the Latter Half of the 1st Millennium BC. In: Z. Woźniak, M. Grygiel, H. Machajewski, A. Michałowski (eds.), The Jastorf Culture in Poland: 5-22. Archaeopress, Oxford [=BAR International Series 2579].